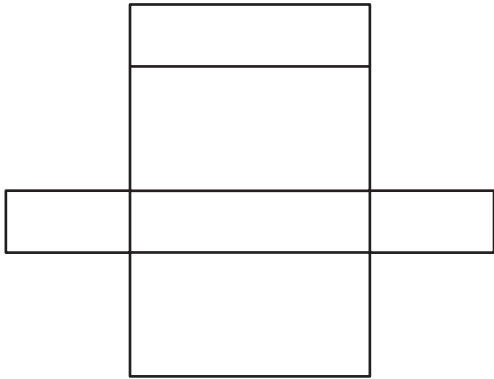# 3D Shapes and Nets
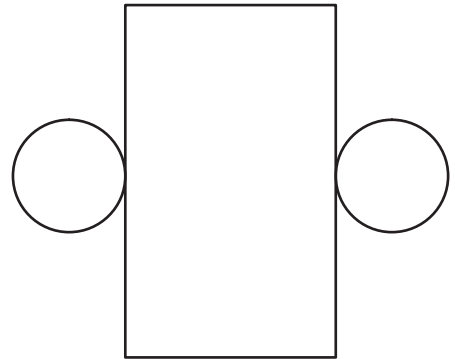
Name the 3D shape formed by each net.

1)

_____

2)

_____
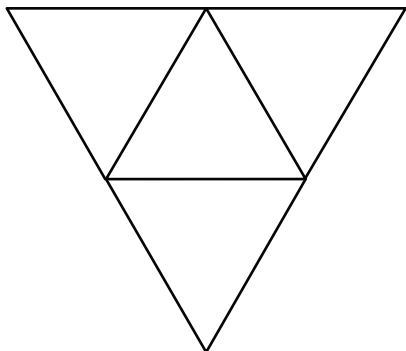
3)

_____
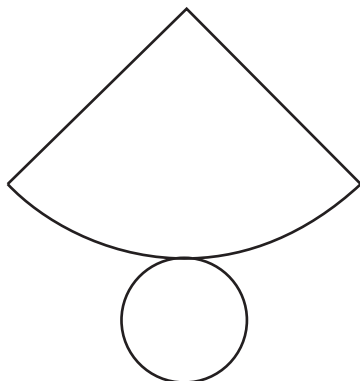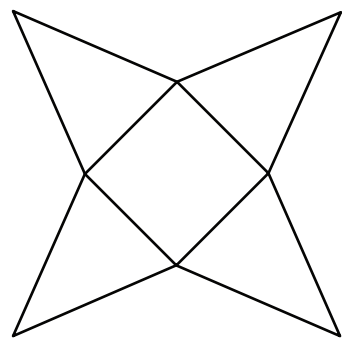
4)
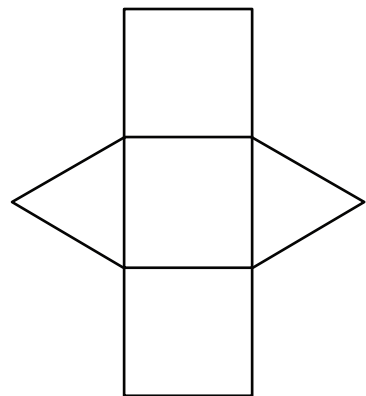
_____

5)

_____

6)

_____

Area of a Square

A) Find the area of each square for the given side length.

1) Side length = $\frac{5}{2}$ m

    Area = _____

2) Side length = $2\frac{1}{3}$ mm

    Area = _____

3) Side length = $\frac{1}{6}$ mm

    Area = _____

4) Side length = $3\frac{3}{4}$ cm

    Area = _____

B) Find the area of each square.

5)

$\frac{7}{2}$ cm

    Area = _____

6)

$\frac{10}{3}$ m

    Area = _____

7)

$\frac{3}{5}$ m

    Area = _____

8)

$1\frac{2}{7}$ mm

    Area = _____

9) If the side of a square measures $\frac{8}{9}$ cm, determine the area.

_____

Name : _____

Area of a Square

A) Find the area of each square for the given side length.

1) Side length = $\frac{2}{3}$ cm

Area = _____

2) Side length = $\frac{5}{8}$ m

Area = _____

3) Side length = $1\frac{5}{9}$ m

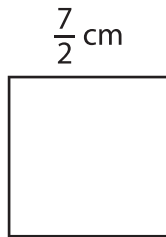Area = _____

4) Side length = $\frac{1}{5}$ mm

Area = _____

B) Find the area of each square.

5)

$\frac{9}{11}$ mm

Area = _____

6)

$\frac{7}{5}$ cm

Area = _____

7)

$6\frac{1}{2}$ cm

Area = _____

8)

$\frac{5}{4}$ m
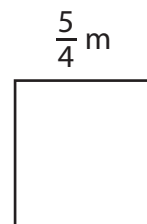
Area = _____

9) The length of the side of a square is $\frac{6}{5}$ mm. What is the area of the square?

_____

Name : _____

Area of a Square

A) Find the area of each square for the given side length.

1) Side length = $\frac{3}{4}$ mm

Area = _____

2) Side length = $3\frac{2}{3}$ cm

Area = _____

3) Side length = $\frac{1}{2}$ cm

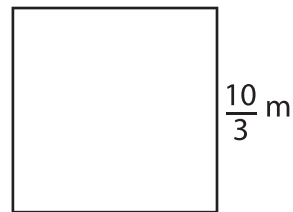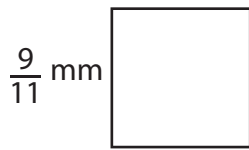Area = _____

4) Side length = $\frac{5}{6}$ m

Area = _____

B) Find the area of each square.

5)

$\frac{9}{5}$ m

Area = _____

6)

$\frac{10}{7}$ mm

Area = _____

7)

$\frac{2}{7}$ mm

Area = _____

8)

$2\frac{2}{5}$ cm
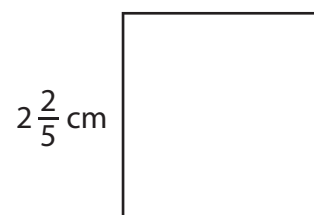
Area = _____

9) If the length of the side of a square is $2\frac{5}{7}$ m, determine the area.

_____

Name : _____

Area of a Square

A) Find the area of each square for the given side length.

1) Side length = $\frac{1}{7}$ m

   Area = _____

2) Side length = $\frac{5}{9}$ cm

   Area = _____

3) Side length = $\frac{10}{13}$ cm

   Area = _____

4) Side length = $3\frac{1}{4}$ mm

   Area = _____
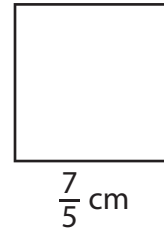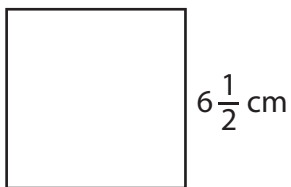
B) Find the area of each square.

5)

   $\frac{15}{6}$ mm

   Area = _____

6)

   $\frac{17}{5}$ m

   Area = _____

7)

   $2\frac{3}{4}$ m

   Area = _____

8)

   $\frac{7}{11}$ cm
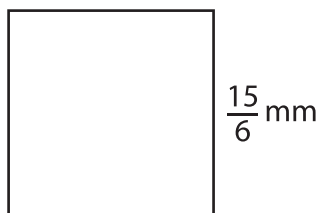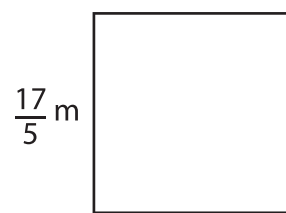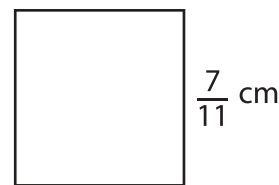
   Area = _____

9) The length of the side of a square is $\frac{2}{5}$ mm. What is the area of the square?

   _____

Area of a Square

A) Find the area of each square for the given side length.

1) Side length = $1\frac{5}{6}$ cm

Area = _____

2) Side length = $\frac{5}{11}$ mm

Area = _____

3) Side length = $\frac{4}{7}$ mm

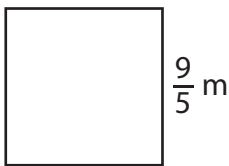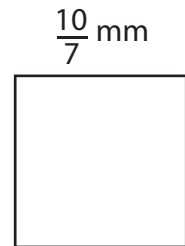Area = _____

4) Side length = $\frac{9}{4}$ m
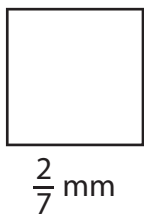
Area = _____

B) Find the area of each square.

5) $\frac{11}{3}$ m

Area = _____

6) $\frac{5}{9}$ cm

Area = _____

7) $1\frac{4}{5}$ cm

Area = _____

8) $\frac{10}{7}$ mm
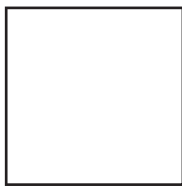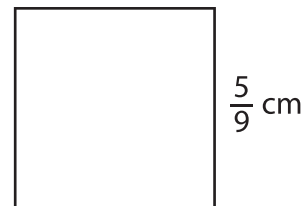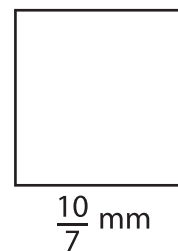
Area = _____

9) If the side of a square measures $\frac{7}{9}$ m, determine the area.

_____

Name : _____

Identifying Ordered Pairs

A) Write the point that is located at each ordered pair.

1) (1, 3) _____

2) (-4, 0) _____

3) (-1, 1) _____

4) (4, -2) _____

5) (2, -3) _____

6) (3, 1) _____

7) (4, 4) _____

8) (0, -4) _____

9) (-3, 3) _____

10) (-4, -3) _____
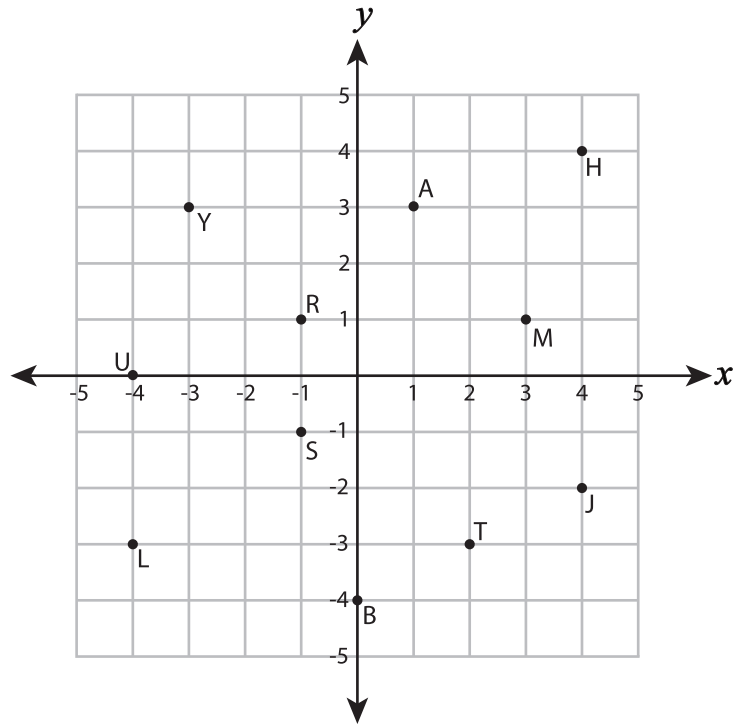
B) Write the ordered pair for each point.
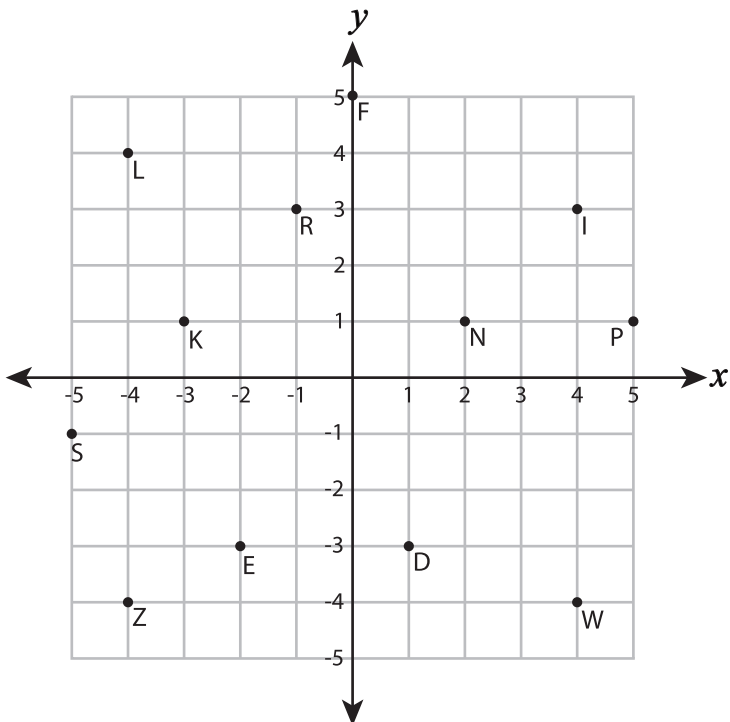
11) L (___ , ___)

12) S (___ , ___)

13) E (___ , ___)

14) K (___ , ___)

15) N (___ , ___)

16) F (___ , ___)

17) I (___ , ___)

18) P (___ , ___)

19) D (___ , ___)

20) Z (___ , ___)

Name : _____

Identifying Ordered Pairs

A) Write the point that is located at each ordered pair.

1) (4, -5) _____

2) (3, 4) _____

3) (-5, -4) _____

4) (5, 0) _____

5) (1, -1) _____

6) (-5, 3) _____

7) (0, 2) _____

8) (-4, -1) _____

9) (5, -3) _____

10) (3, 1) _____

B) Write the ordered pair for each point.
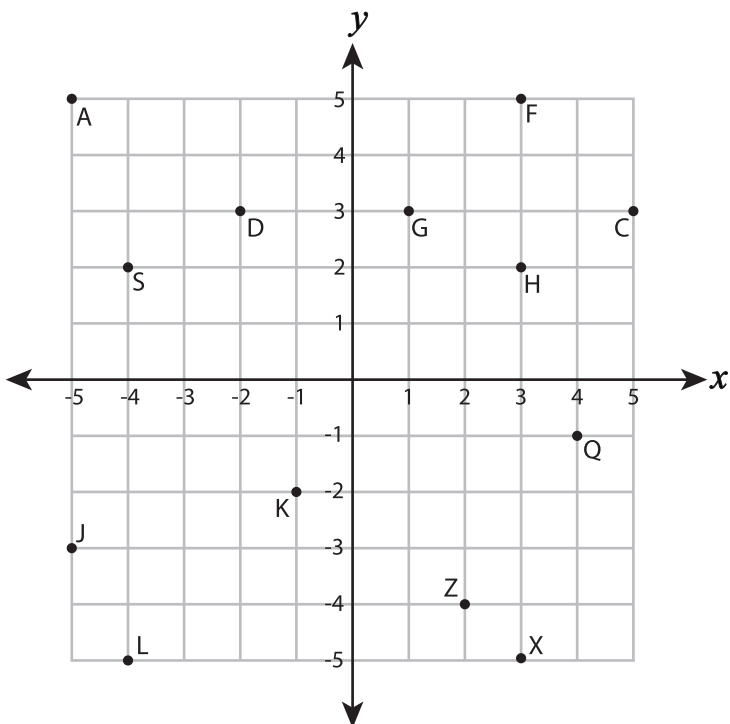
11) H (___ , ___)

12) Q (___ , ___)

13) K (___ , ___)

14) G (___ , ___)

15) S (___ , ___)

16) J (___ , ___)

17) Z (___ , ___)

18) D (___ , ___)

19) A (___ , ___)

20) L (___ , ___)

Name : _____

Identifying Ordered Pairs

A) Write the point that is located at each ordered pair.

1) (4, 1) _____

2) (3, -5) _____

3) (-5, 1) _____

4) (5, 5) _____

5) (1, -4) _____

6) (-1, -5) _____

7) (-3, -3) _____

8) (-5, -2) _____

9) (-2, 1) _____

10) (1, 2) _____
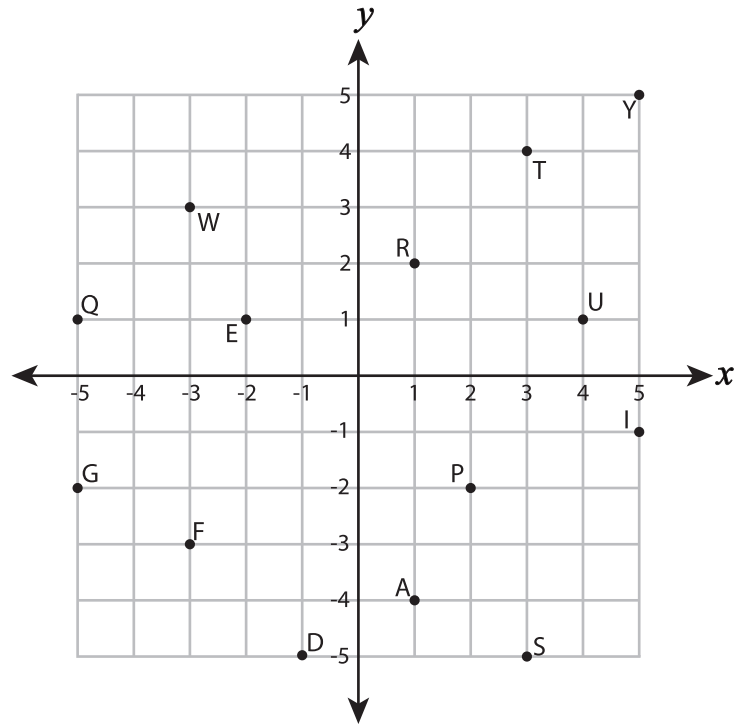
B) Write the ordered pair for each point.
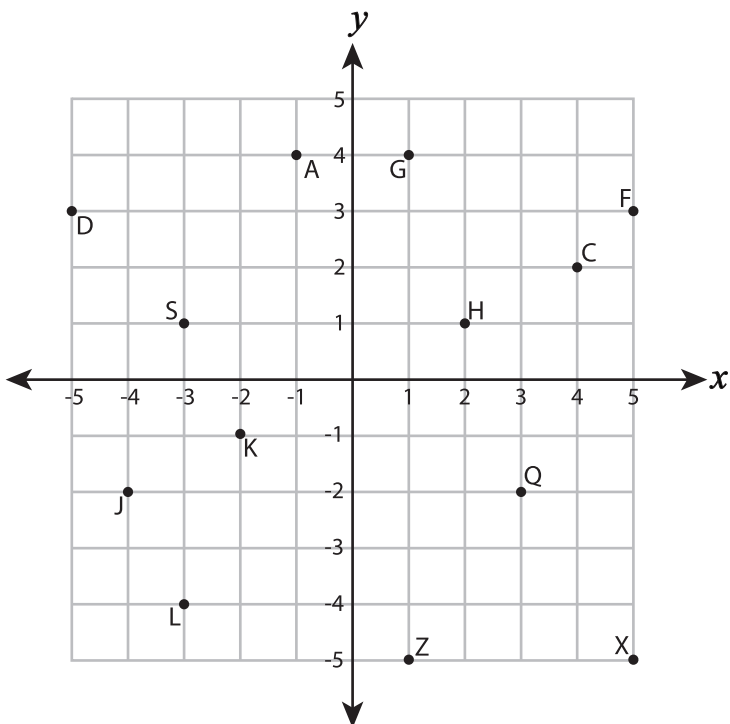
11) Q (___ , ___)

12) S (___ , ___)

13) D (___ , ___)

14) L (___ , ___)

15) G (___ , ___)

16) Z (___ , ___)

17) X (___ , ___)

18) A (___ , ___)

19) J (___ , ___)

20) F (___ , ___)

Identifying Ordered Pairs

A) Write the point that is located at each ordered pair.

1) (5, -3) _____

2) (3, 0) _____

3) (-4, 4) _____

4) (2, -5) _____

5) (0, 3) _____

6) (2, 1) _____

7) (-1, -4) _____

8) (3, 4) _____

9) (-2, -1) _____

10) (4, -3) _____
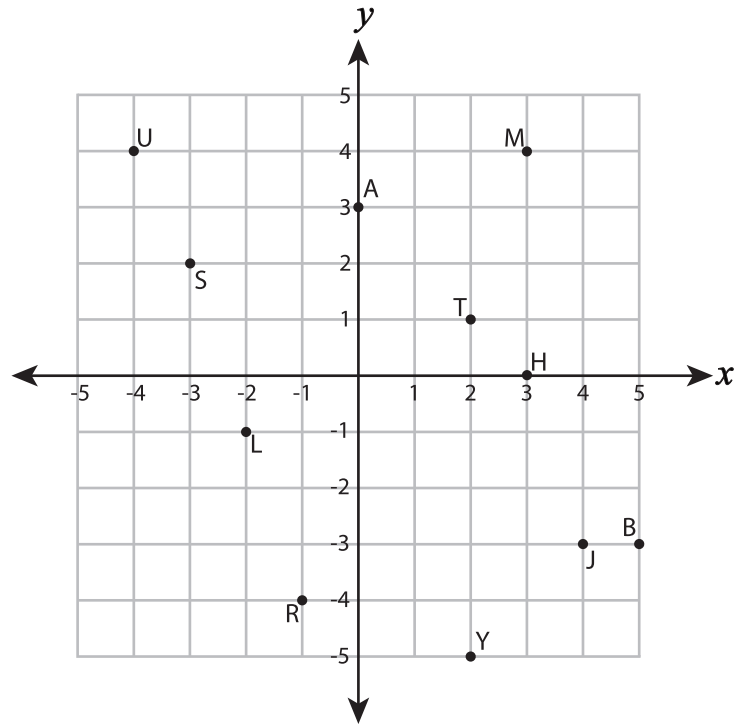
B) Write the ordered pair for each point.
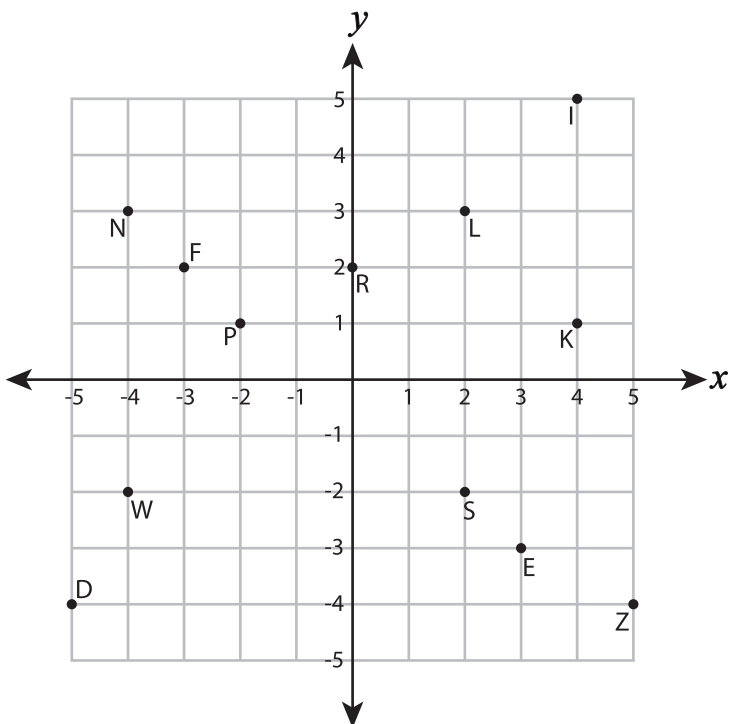
11) S (___ , ___)

12) D(___ , ___)

13) W(___ , ___)

14) N(___ , ___)

15) K (___ , ___)

16) I (___ , ___)

17) P (___ , ___)

18) F (___ , ___)

19) L (___ , ___)

20) Z(___ , ___)

Name : _____

Identifying Ordered Pairs
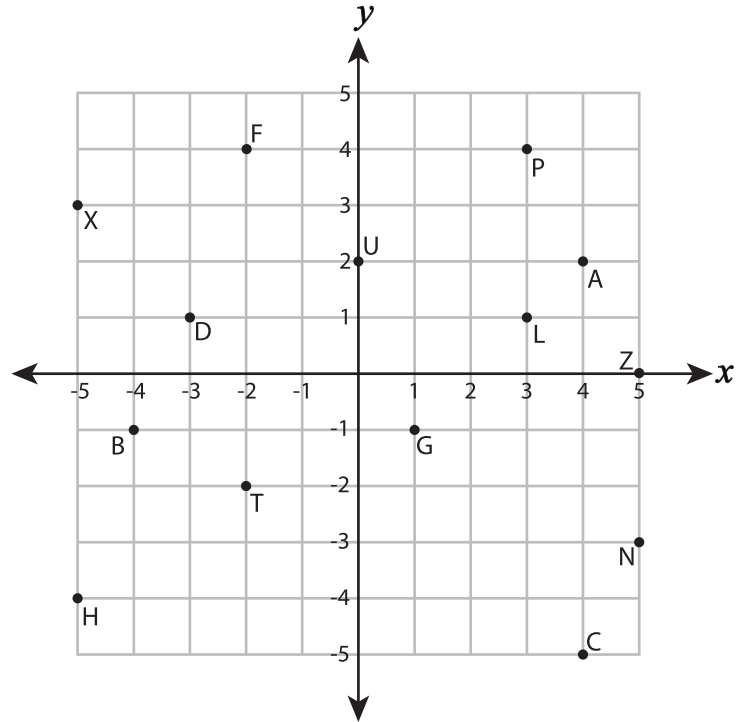
A) Write the point that is located at each ordered pair.

1) (0, 4) _____

2) (-3, -4) _____

3) (3, -2) _____

4) (-1, -1) _____

5) (-3, 5) _____

6) (-4, 2) _____

7) (-5, -1) _____

8) (-2, 1) _____

9) (-1, 3) _____

10) (0, -3) _____
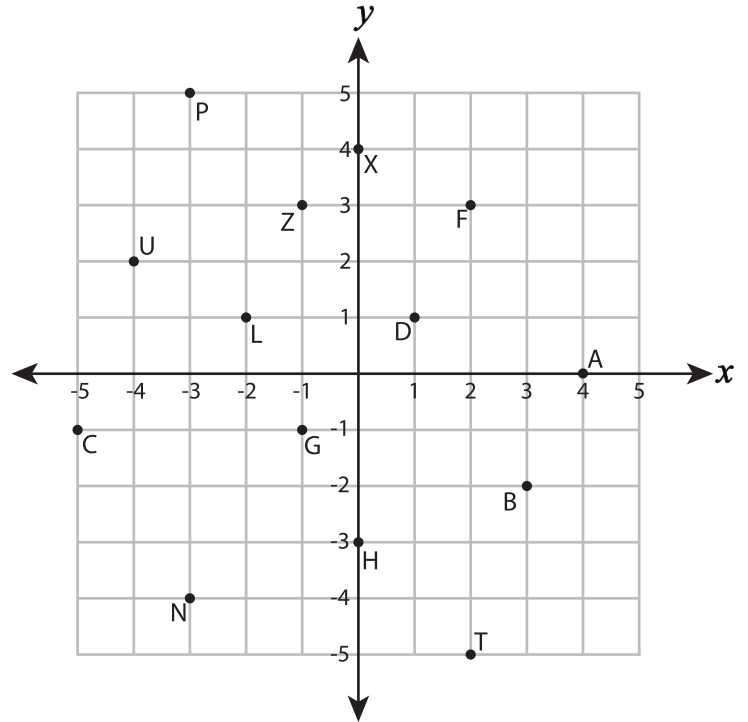
B) Write the ordered pair for each point.
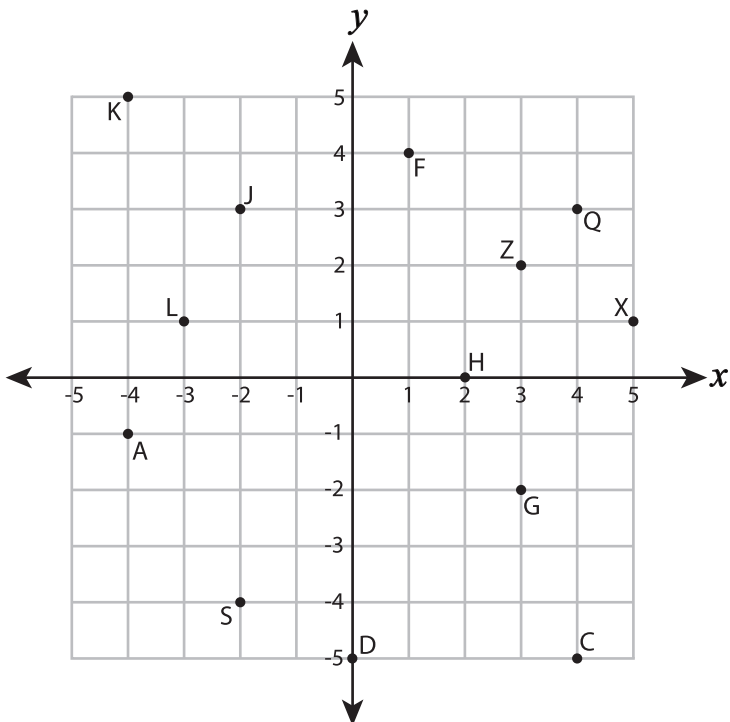
11) D (___ , ___)

12) S (___ , ___)

13) A (___ , ___)

14) X (___ , ___)

15) L (___ , ___)

16) K (___ , ___)

17) H (___ , ___)

18) Z (___ , ___)

19) G (___ , ___)

20) Q (___ , ___)

One-Step Equations: Integers

Solve each equation.

1) $x + 9 = 12$

2) $s - 1 = 10$

3) $3 = z - 11$

4) $5 + y = 7$

5) $8 = 2 + q$

6) $6 = n - 4$

7) $r - 2 = 5$

8) $6 = m + 6$

9) $p + 7 = 8$

10) $4 + a = 13$

One-Step Equations: Integers

Add/Sub   Level 1: S2

Solve each equation.

1) $11 = z - 5$

2) $w - 7 = 2$

3) $15 = 12 + s$

4) $q + 6 = 20$

5) $p - 10 = 3$

6) $15 = m + 9$

7) $8 + a = 13$

8) $5 = y - 4$

9) $n - 2 = 18$

10) $u + 14 = 15$

One-Step Equations: Integers

Solve each equation.

1) $3 + u = 9$

2) $12 = a + 7$

3) $13 = c - 6$

4) $p - 4 = 0$

5) $16 = s + 1$

6) $v + 5 = 12$

7) $w - 8 = 4$

8) $2 + t = 3$

9) $7 = 4 + g$

10) $b - 10 = 1$

Name : _____

One-Step Equations: Integers

Solve each equation.

1) $y - 9 = 3$

2) $m + 4 = 11$

3) $7 = b + 7$

4) $a - 1 = 9$

5) $9 = 2 + x$

6) $s - 3 = 4$

7) $n - 5 = 10$

8) $18 = r + 6$

9) $11 = 6 + z$

10) $5 + p = 8$

Name : _____

One-Step Equations: Integers

Solve each equation.

1) $7 = 2 + a$

2) $d - 9 = 9$

3) $p - 3 = 5$

4) $16 = s - 2$

5) $z - 6 = 7$

6) $11 = 1 + u$

7) $y + 4 = 5$

8) $8 = q - 3$

9) $5 = 2 + r$

10) $v - 9 = 6$

Representation of Integers

Write an integer to represent each situation mentioned below:

1) James withdrew $80 from his bank account.

   _____

2) Harry adds 18 more toy cars to his collection.

   _____

3) Kevin took 5 crayons to school and lost them all.

   _____

4) Lillian received $10 as pocket money from her dad.

   _____

5) Mr. Johnson was fined $13 as he failed to pay the telephone bill on time.

   _____

6) Anna's vegetable patch yielded 26 tomatoes in all.

   _____

7) Danny distributed 19 cupcakes to his friends on Thanksgiving Day.

   _____

8) Jim's friend gave him 7 candies.

   _____

9) Boston recorded a subzero temperature of 31^0F.

   _____

10) The University basket ball match team lost their 12 points lead in the final quarter of the match.

   _____

Representation of Integers

Write an integer to represent each situation mentioned below:

1) Trevor's credit card bill is $23 more than it was the previous month.

    _____

2) The stock market lost 6 points at the time of the closing bell.

    _____

3) Lara owes $15 to her friend Max.

    _____

4) There was an increase in price of crude oil by $3 yesterday.

    _____

5) Frieda lost $75 playing roulette at a casino.

    _____

6) The Mariana Trench is located 36,070 feet below sea level.

    _____

7) Graham worked 8 hours overtime on Monday.

    _____

8) There was a shortage of $76 in the petty cash fund.

    _____

9) 57 apples were damaged in transit.

    _____

10) The temperature rose by 9 degrees today.

    _____

Representation of Integers

Sheet 3

Write an integer to represent each situation mentioned below:

1) Brenda spilled 8 ounces of lemonade accidentally.

   _____

2) Mr. Meyer's bank account was credited with $85.

   _____

3) Susan went on a low-carb diet and lost 23 pounds.

   _____

4) The starting point of the trek was 59 feet above sea level.

   _____

5) Gillian bought 6 goldfish and put them in her aquarium.

   _____

6) Charlotte spent $65 on a new hairdo.

   _____

7) The temperature of the surrounding area decreased by 9^0F.

   _____

8) Phoenix Blasters lost the basketball game by 11 points.

   _____

9) Kirk was gifted 5 storybooks by his aunt.

   _____

10) 17 gallons of water overflowed from a barrel.

   _____

Name : _____

Greatest Common Factor

Find the greatest common factor for each pair of numbers.

1)   28, 12

Factors of 28 = _____

Factors of 12 = _____

GCF(28, 12)   = _____

2)   90, 30

Factors of 90 = _____

Factors of 30 = _____

GCF(90, 30)   = _____

3)   36, 54

Factors of 36 = _____

Factors of 54 = _____

GCF(36, 54)   = _____

4)   26, 52

Factors of 26 = _____

Factors of 52 = _____

GCF(26, 52)   = _____

5)   21, 27

Factors of 21 = _____

Factors of 27 = _____

GCF(21, 27)   = _____

Name : _____

Greatest Common Factor

Find the greatest common factor for each pair of numbers.

1)   36, 24

   Factors of 36 = _____

   Factors of 24 = _____

   GCF(36, 24)   = _____

2)   44, 66

   Factors of 44 = _____

   Factors of 66 = _____

   GCF(44, 66)   = _____

3)   40, 80

   Factors of 40 = _____

   Factors of 80 = _____

   GCF(40, 80)   = _____

4)   84, 14

   Factors of 84 = _____

   Factors of 14 = _____

   GCF(84, 14)   = _____

5)   45, 75

   Factors of 45 = _____

   Factors of 75 = _____

   GCF(45, 75)   = _____

Name : _____

Greatest Common Factor

Find the greatest common factor for each pair of numbers.

1)   98, 28

Factors of 98 = _____

Factors of 28 = _____

GCF(98, 28)   = _____

2)   12, 42

Factors of 12 = _____

Factors of 42 = _____

GCF(12, 42)   = _____

3)   72, 60

Factors of 72 = _____

Factors of 60 = _____

GCF(72, 60)   = _____

4)   55, 99

Factors of 55 = _____

Factors of 99 = _____

GCF(55, 99)   = _____

5)   76, 32

Factors of 76 = _____

Factors of 32 = _____

GCF(76, 32)   = _____

Number Names - Decimals

Write each decimal in words.

1) 173.567679 _____

_____

_____

2) 325.09062 _____

_____

_____

3) 69.3512 _____

_____

_____

4) 9.27 _____

_____

_____

Write in decimals.

1)   thirty and twelve thousand, five hundred forty-eight hundred-thousandths

      _____

2)   two hundred fifty-four and six tenths

      _____

3)   eighty-one and seven hundred twelve thousand, eight hundred
      fifty-three millionths

      _____

4)   five hundred nineteen and eight thousand, three hundred forty-seven
      ten-thousandths

      _____

Number Names - Decimals

Write each decimal in words.

1) 71.5832   _____

    _____

    _____

2) 802.794356   _____

    _____

    _____

3) 3.028   _____

    _____

    _____

4) 94.46582   _____

    _____

    _____

Write in decimals.

1) one hundred fifty-six and two hundred seven thousand, five hundred eighty-nine millionths

    _____

2) five and thirteen thousand, six hundred seventy-four hundred-thousandths

    _____

3) sixty and three tenths

    _____

4) three hundred forty-seven and eight thousand, five hundred ninety ten-thousandths

    _____

Number Names - Decimals

Write each decimal in words.

1) 8.17349 _____

    _____

    _____

2) 430.067542 _____

    _____

    _____

3) 71.4257 _____

    _____

    _____

4) 354.9 _____

    _____

    _____

Write in decimals.

1) ninety-six and three hundred eighty-one thousand, nine hundred
    fifty-four millionths

    _____

2) four and fifty-one hundredths

    _____

3) six hundred twenty-three and seventy-five thousand, four hundred
    eighty-six hundred-thousandths

    _____

4) twenty-five and eight hundred ninety-three ten-thousandths

    _____

Number Names - Decimals

Write each decimal in words.

1) 86.045327   _____

_____

_____

2) 127.3902   _____

_____

_____

3) 7.56097   _____

_____

_____

4) 519.28   _____

_____

_____

Write in decimals.

1)   seventy-four and six thousand, two hundred eighteen ten-thousandths

_____

2)   eight and seventy thousand, three hundred ninety-four hundred-thousandths

_____

3)   six hundred five and four hundred thirty-eight thousand, one hundred
     two millionths

_____

4)   thirty and eight hundred fifty-two thousandths

_____

Number Names - Decimals

Write each decimal in words.

1) 143.962   _____

    _____

    _____

2) 64.75421   _____

    _____

    _____

3) 5.203967   _____

    _____

    _____

4) 732.5416   _____

    _____

    _____

Write in decimals.

1)   nine and six tenths

      _____

2)   eighty-seven and thirteen thousand, seven hundred twenty-six
      hundred-thousandths

      _____

3)   two hundred fifty-six and three thousand, seven hundred eighty-four
      ten-thousandths

      _____

4)   one and four hundred twenty thousand, six hundred thirteen millionths

      _____

Name: _____

Multiplying Fractions - Cross Cancellation

Find the product.

1) $\dfrac{9}{10} \times \dfrac{2}{3}$

2) $\dfrac{12}{8} \times \dfrac{18}{16}$

3) $\dfrac{33}{7} \times \dfrac{14}{21}$

4) $\dfrac{6}{18} \times \dfrac{9}{42}$

5) $\dfrac{22}{15} \times \dfrac{45}{4}$

6) $\dfrac{3}{28} \times \dfrac{35}{6}$

7) $\dfrac{2}{7} \times \dfrac{35}{12}$

8) $\dfrac{16}{15} \times \dfrac{21}{24}$

Printable Worksheets @ www.mathworksheets4kids.com

Multiplying Fractions - Cross Cancellation

Find the product.

1) $\dfrac{4}{9} \times \dfrac{27}{20}$

2) $\dfrac{11}{12} \times \dfrac{26}{55}$

_____

_____

3) $\dfrac{7}{6} \times \dfrac{2}{3}$

4) $\dfrac{21}{8} \times \dfrac{20}{9}$

_____

_____

5) $\dfrac{7}{3} \times \dfrac{27}{4}$

6) $\dfrac{9}{20} \times \dfrac{15}{12}$

_____

_____

7) $\dfrac{5}{12} \times \dfrac{6}{25}$

8) $\dfrac{30}{9} \times \dfrac{10}{12}$

_____

_____

Multiplying Fractions - Cross Cancellation

Find the product.

1) $\dfrac{3}{10} \times \dfrac{4}{5}$

        _____

2) $\dfrac{10}{7} \times \dfrac{28}{15}$

        _____

3) $\dfrac{7}{3} \times \dfrac{12}{14}$

        _____

4) $\dfrac{3}{4} \times \dfrac{28}{18}$

        _____

5) $\dfrac{14}{9} \times \dfrac{8}{28}$

        _____

6) $\dfrac{44}{18} \times \dfrac{36}{11}$

        _____

7) $\dfrac{6}{13} \times \dfrac{26}{24}$

        _____

8) $\dfrac{7}{35} \times \dfrac{10}{21}$

        _____

Ratio: Drawing Activity

1) Draw circles and triangles in the ratio 2 : 5.

    _____

2) Draw hearts and squares in the ratio 7 : 3.

    _____

3) Draw stars and pentagons in the ratio 4 : 2.

    _____

4) Draw ovals and rectangles in the ratio 6 : 7.

    _____

5) Draw hexagons and circles in the ratio 8 : 4.

    _____

6) Draw diamonds and ovals in the ratio 5 : 3.

    _____

7) Draw parallelograms and stars in the ratio 3 : 6.

    _____

Ratio: Drawing Activity

1) Draw stars and hexagons in the ratio 5 : 4.

   _____

2) Draw rectangles and hearts in the ratio 6 : 2.

   _____

3) Draw squares and stars in the ratio 4 : 6.

   _____

4) Draw circles and parallelograms in the ratio 7 : 2.

   _____

5) Draw ovals and pentagons in the ratio 9 : 3.

   _____

6) Draw rectangles and rhombuses in the ratio 6 : 5.

   _____

7) Draw hearts and triangles in the ratio 1 : 8.

   _____

Ratio: Drawing Activity

1) Draw ovals and diamonds in the ratio 9 : 4.

_____

2) Draw parallelograms and hexagons in the ratio 3 : 5.

_____

3) Draw rectangles and squares in the ratio 7 : 1.

_____

4) Draw pentagons and hearts in the ratio 5 : 2.

_____

5) Draw stars and triangles in the ratio 2 : 8.

_____

6) Draw squares and circles in the ratio 6 : 3.

_____

7) Draw hearts and stars in the ratio 7 : 4.

_____

Name : _____

Division

1)
343 | 7, 0 3 9

2)
87 | 3, 7 4 7

3)
124 | 9, 5 4 8

4)
16 | 6, 7 8 2

5)
604 | 8, 4 5 6

6)
231 | 1, 6 3 4

7)
512 | 4, 5 1 3

8)
710 | 5, 3 0 1

9)
45 | 2, 6 5 5

Name : _____

Division

1)

62 | 4, 5 8 8

2)

430 | 8, 2 4 5

3)

713 | 5, 7 3 0

4)

275 | 3, 5 7 9

5)

91 | 2, 8 2 1

6)

330 | 9, 5 5 4

7)

23 | 7, 1 0 7

8)

547 | 6, 2 6 3

9)

76 | 1, 0 9 2

Name : _____

Division

1)

142 | 2, 4 2 1

2)

31 | 1, 3 3 3

3)

820 | 7, 6 9 4

4)

54 | 4, 7 0 9

5)

427 | 5, 6 8 7

6)

73 | 8, 1 7 6

7)

902 | 6, 0 5 8

8)

26 | 3, 4 3 2

9)

621 | 9, 0 2 5

Name : _____

Plotting Points

A) Plot each point on the coordinate grid.

1) D(-2, 3)

2) H(-1, -5)

3) K(2, 2)

4) U(2, 4)

5) E(-1, -1)

6) L(-3, 5)

7) P(0, 5)

8) A(-3, -4)

9) C(1, 4)

10) G(-1, 0)
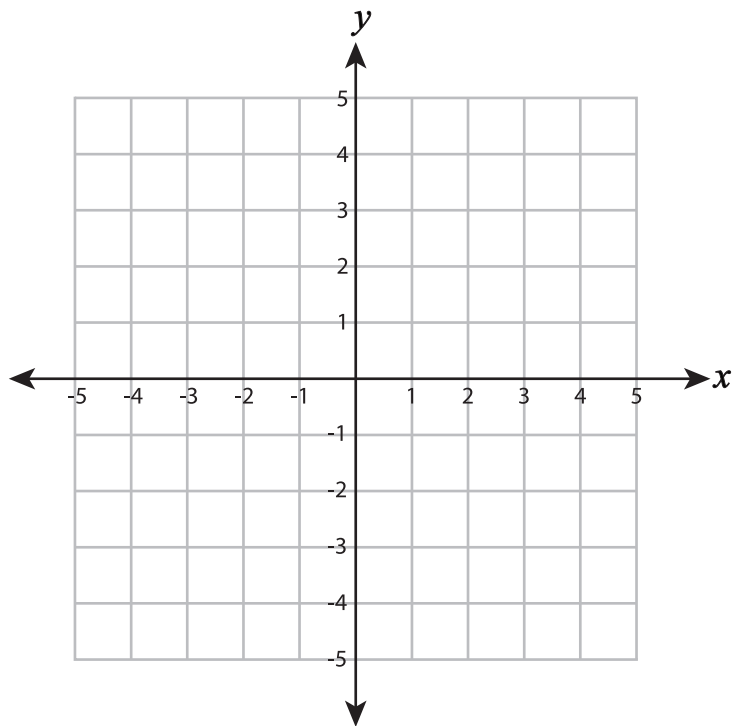
B) Draw each shape on the coordinate grid.
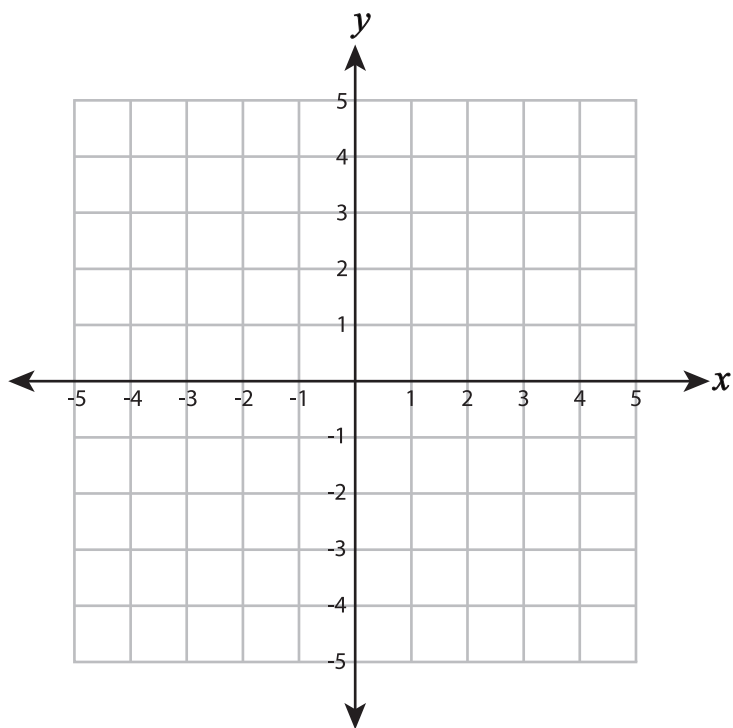
11) Draw ◯ at (5, 0)

12) Draw ☆ at (-4, 5)

13) Draw ▭ at (-1, -3)

14) Draw △ at (0, 5)

15) Draw □ at (4, -4)

Plotting Points

A) Plot each point on the coordinate grid.

1) J(1, 3)

2) L(-5, 1)

3) F(-4, -1)

4) Y(3, 1)

5) T(5, 5)

6) E(-4, 0)

7) Q(-1, 4)

8) X(-5, -3)

9) Z(2, -3)

10) H(-4, 2)
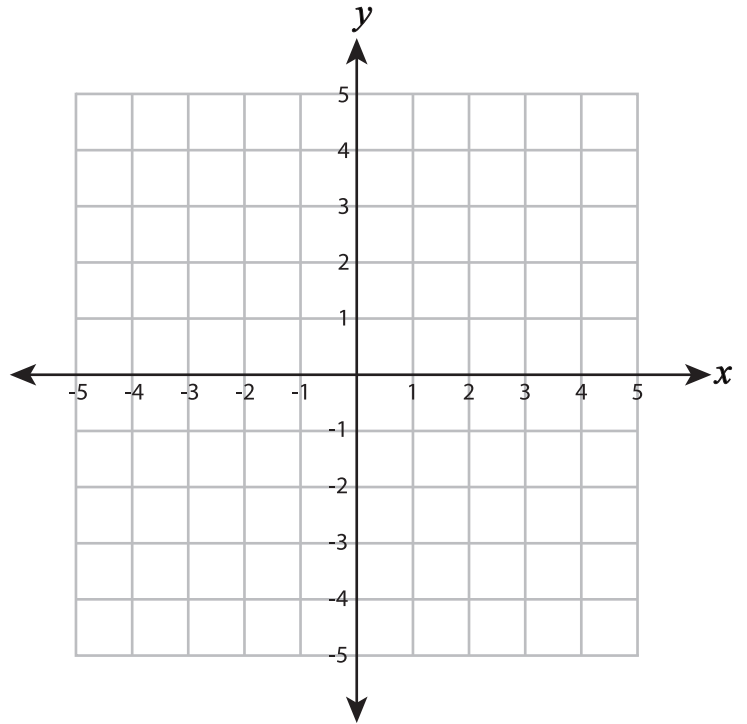
B) Draw each shape on the coordinate grid.
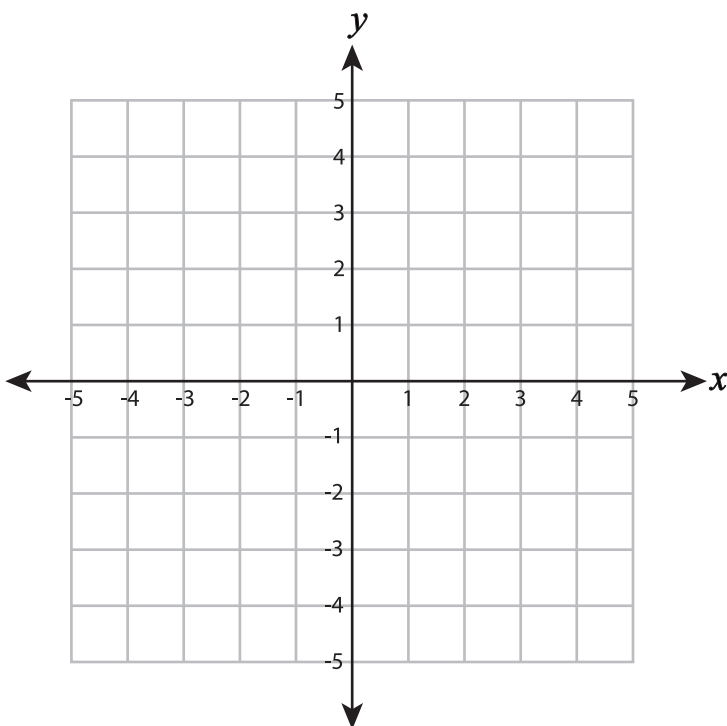
11) Draw ◯ at (4, 3)

12) Draw ☆ at (1, -5)

13) Draw ▭ at (-4, -5)

14) Draw △ at (5, -4)

15) Draw ☐ at (0, -2)

Name : _____

Plotting Points

A) Plot each point on the coordinate grid.

1) P(-4, 1)   2) E(5, 2)

3) R(-2, -5)   4) I(1, -3)

5) M(-4, 4)   6) D(0, -1)
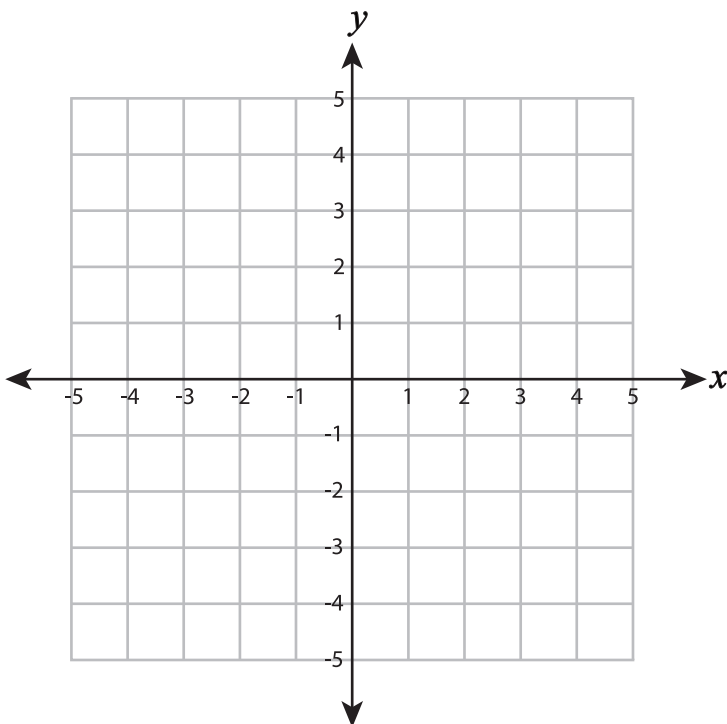
7) H(-2, 5)   8) G(-4, -3)

9) L(3, -3)   10) X(2, 2)
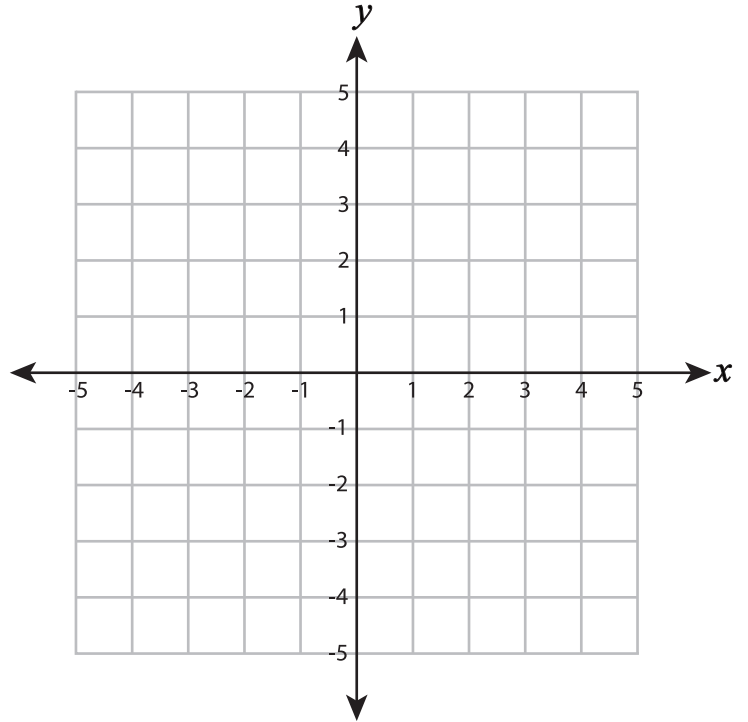
B) Draw each shape on the coordinate grid.

11) Draw ◯ at (3, -4)

12) Draw ☆ at (-5, 5)

13) Draw ▭ at (3, 0)

14) Draw △ at (-1, -4)

15) Draw □ at (4, 4)

Name : _____

Plotting Points

A) Plot each point on the coordinate grid.

1) G(4, -5)

2) L(0, -3)

3) X(-2, 5)

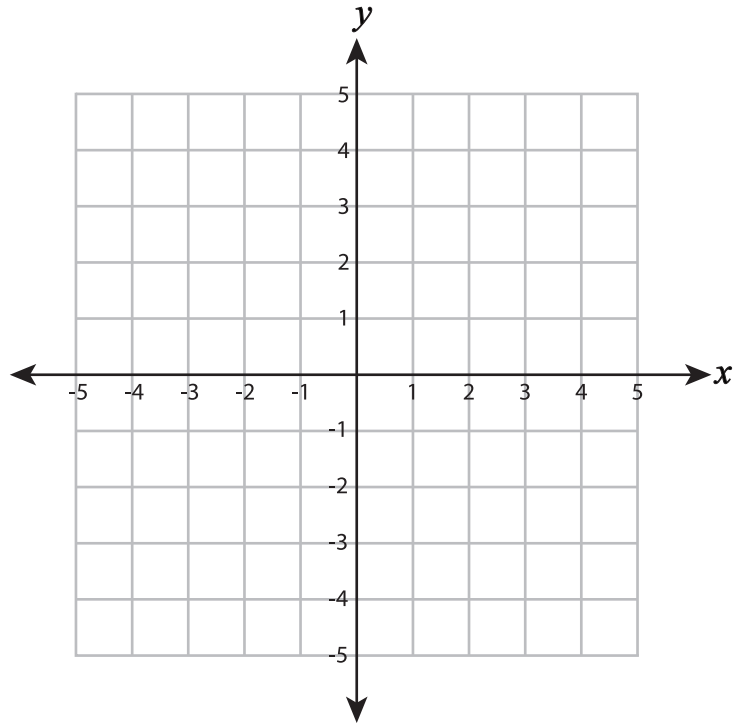4) R(3, -4)

5) P(1, 2)

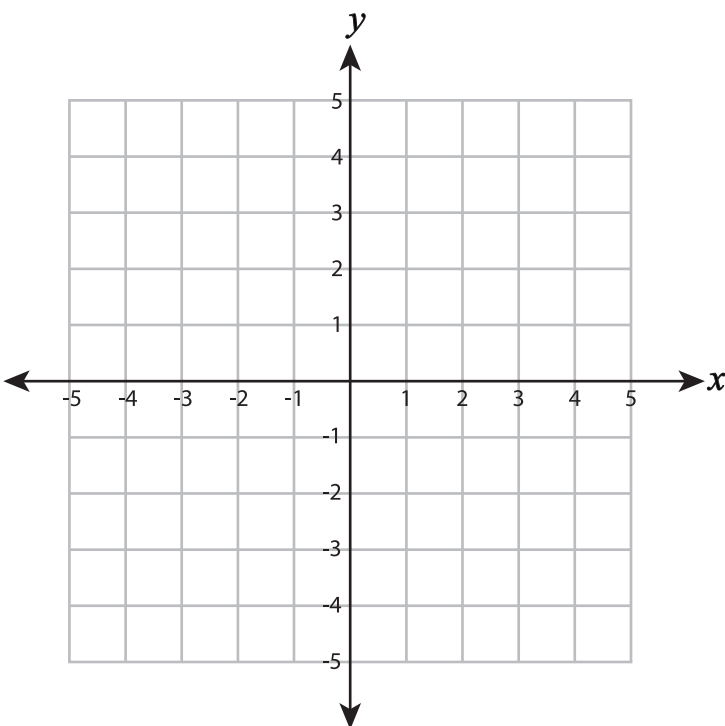6) D(-2, -3)

7) E(-4, 3)

8) M(4, 2)

9) H(2, 4)

10) I(-4, -1)

B) Draw each shape on the coordinate grid.

11) Draw ◯ at (-1, 3)

12) Draw ☆ at (-3, -2)

13) Draw ▭ at (0, 1)

14) Draw △ at (3, 2)

15) Draw ▢ at (2, -2)

Name : _____

Plotting Points

A) Plot each point on the coordinate grid.

1) A(-3, 2)   2) C(4, 5)

3) G(-2, 4)   4) K(3, 4)

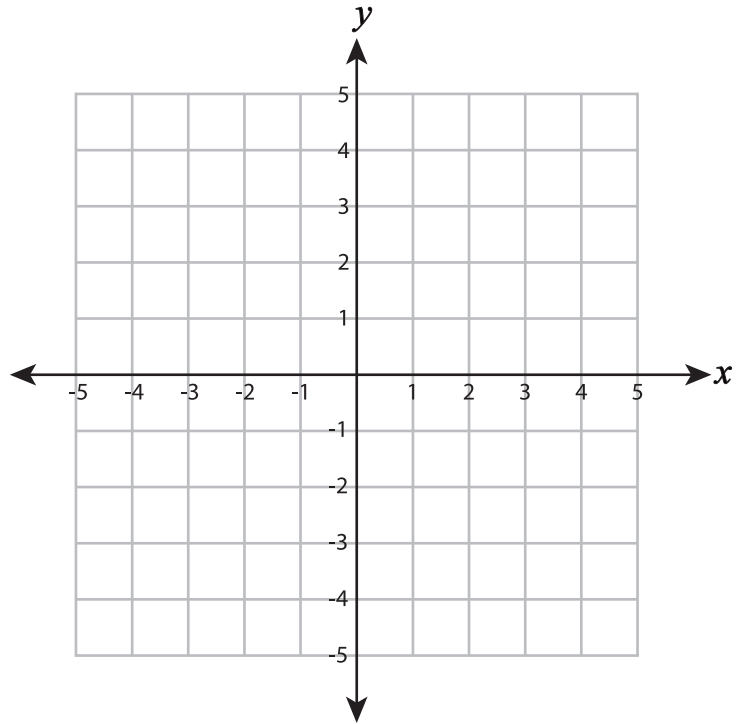5) D(-2, -3)   6) H(4, -3)

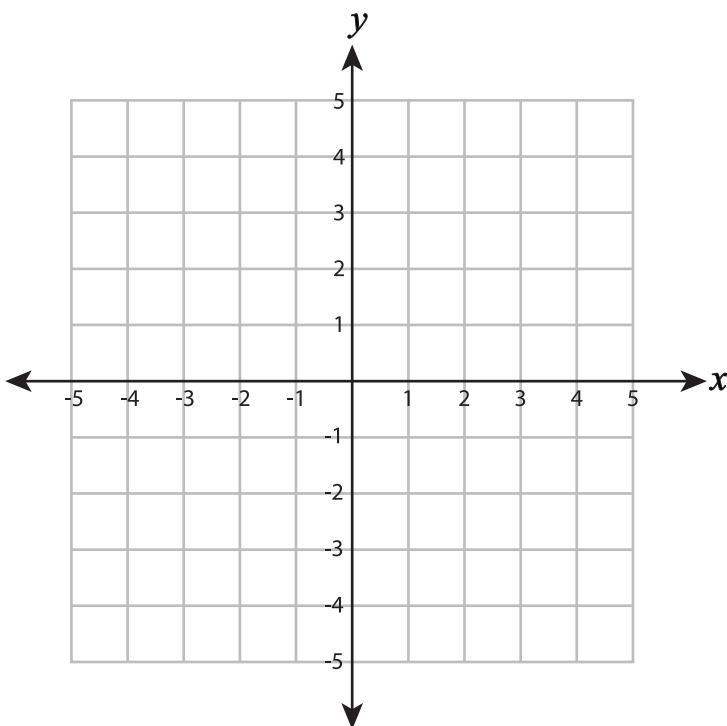7) U(1, 3)   8) E(-2, 1)

9) L(-4, -2)   10) P(3, -2)

B) Draw each shape on the coordinate grid.

11) Draw ◯ at (-3, -4)

12) Draw ☆ at (3, -2)

13) Draw ▭ at (4, 3)

14) Draw △ at (2, -5)

15) Draw □ at (-2, 2)

Name : _____

Solving One-Step Inequalities

ES1

Solve each inequality.

1) $x + 5 < 6$

2) $9x \geq 3$

3) $x - 2 > 4$

4) $\dfrac{x}{9} \leq 1$

5) $10 + x > 17$

6) $8x < 6$

7) $x - 10 \geq 2$

8) $\dfrac{x}{4} < 5$

9) $x + 11 \leq 16$

10) $9x > 12$

11) $x - 15 \leq 1$

12) $\dfrac{x}{3} \geq 7$

Solving One-Step Inequalities

ES2

Solve each inequality.

1) $x - 9 \geq 8$

2) $\dfrac{x}{5} < 2$

3) $x + 11 > 15$

4) $4x \leq 10$

5) $x - 7 > 13$

6) $\dfrac{x}{3} < 6$

7) $16 + x \geq 18$

8) $8x < 12$

9) $x - 2 \leq 5$

10) $\dfrac{x}{4} > 3$

11) $x + 3 \leq 16$

12) $6x < 14$

Name : _____

Solving One-Step Inequalities ES3

Solve each inequality.

1) $\dfrac{x}{3} \le 4$

2) $x - 1 > 5$

3) $6x \le 10$

4) $x + 8 < 11$

5) $\dfrac{x}{2} \ge 7$

6) $x - 3 > 12$

7) $14x \le 2$

8) $9 + x < 16$

9) $\dfrac{x}{5} \ge 1$

10) $x - 4 > 6$

11) $18x \le 3$

12) $x + 7 < 15$

Solving One-Step Inequalities   ES4

Solve each inequality.

1) $6x < 15$

2) $x + 1 \geq 10$

3) $x - 6 \leq 1$

4) $x - 8 \geq 2$

5) $\dfrac{x}{4} < 4$

6) $7 + x \leq 11$

7) $x + 13 > 19$

8) $2x > 8$

9) $\dfrac{x}{9} \geq 2$

10) $\dfrac{x}{6} \leq 3$

11) $x - 12 < 7$

12) $10x \geq 18$

Solving One-Step Inequalities   ES5

Solve each inequality.

1) $18 + x \geq 20$

2) $x - 5 \leq 3$

3) $\dfrac{x}{2} \geq 4$

4) $x - 7 < 15$

5) $3x > 9$

6) $x + 5 < 13$

7) $\dfrac{x}{7} > 2$

8) $x + 15 \leq 18$

9) $8x \geq 14$

10) $12x \leq 20$

11) $\dfrac{x}{8} \leq 1$

12) $x - 19 \geq 2$

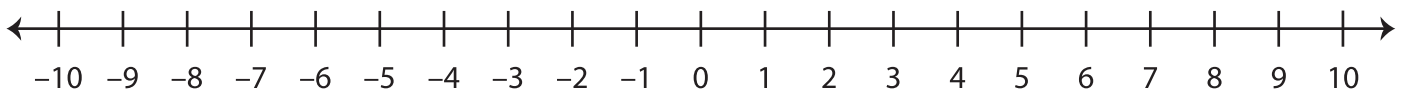# Number Line - Integers

A) Mark the integers on the number line.

1) a) –2   b) 7   c) –5   d) 1

```
←—|——|——|——|——|——|——|——|——|——|——|——|——|——|——|——|——|——|——|——|——|—→
 –10 –9  –8  –7  –6  –5  –4  –3  –2  –1   0   1   2   3   4   5   6   7   8   9   10
```

2) a) 9   b) –4   c) 3   d) –8

```
←—|——|——|——|——|——|——|——|——|——|——|——|——|——|——|——|——|——|——|——|——|—→
 –10 –9  –8  –7  –6  –5  –4  –3  –2  –1   0   1   2   3   4   5   6   7   8   9   10
```

B) Answer the questions using the number line below.

```
←—|——|——|——|——|——|——|——|——|——|——|——|——|——|——|——|——|——|——|——|——|—→
 –10 –9  –8  –7  –6  –5  –4  –3  –2  –1   0   1   2   3   4   5   6   7   8   9   10
```
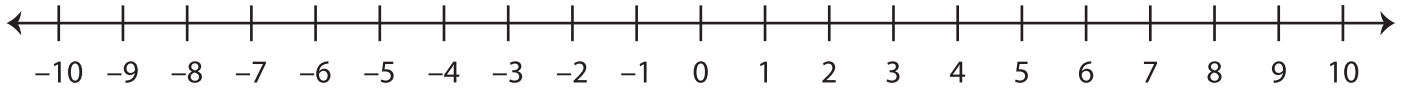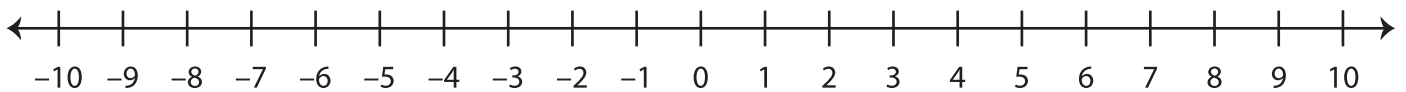
1)   2 units to the left of 3 is   _____

2)   6 units to the right of –1 is   _____

3)   4 units to the left of –4 is   _____

4)   3 units to the right of 7 is   _____

5)   1 unit to the left of 10 is   _____

6)   5 units to the right of –6 is   _____

7)   8 units to the left of 5 is   _____

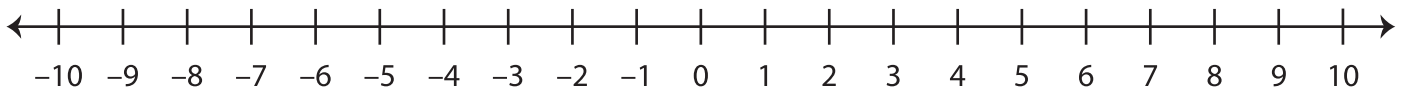## Number Line - Integers
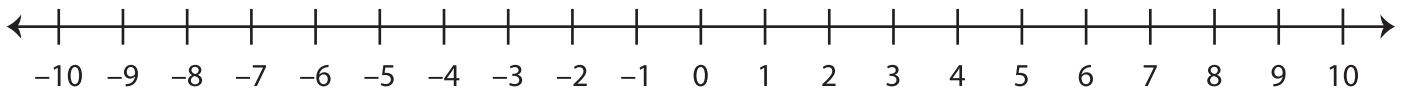
A)   Mark the integers on the number line.

1)   a) 4   b) −6   c) 3   d) −10

−10 −9 −8 −7 −6 −5 −4 −3 −2 −1 0 1 2 3 4 5 6 7 8 9 10

2)   a) −1   b) 8   c) −7   d) 5

−10 −9 −8 −7 −6 −5 −4 −3 −2 −1 0 1 2 3 4 5 6 7 8 9 10

B)   Answer the questions using the number line below.

−10 −9 −8 −7 −6 −5 −4 −3 −2 −1 0 1 2 3 4 5 6 7 8 9 10
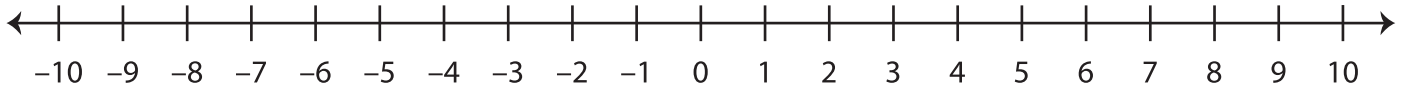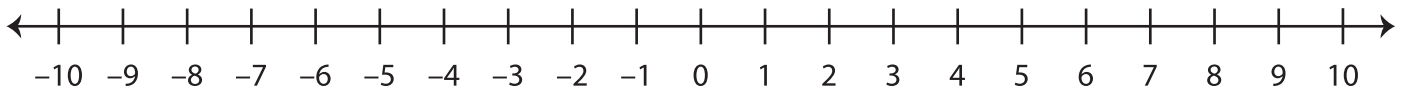
1)   5 units to the right of −5 is   _____

2)   9 units to the right of −8 is   _____

3)   7 units to the left of 1 is   _____

4)   10 units to the left of 3 is   _____

5)   4 units to the right of 2 is   _____

6)   2 units to the right of −7 is   _____

7)   3 units to the left of −6 is   _____

Number Line - Integers

A) Mark the integers on the number line.

1) a) 10   b) −9   c) −3   d) 6

     −10 −9 −8 −7 −6 −5 −4 −3 −2 −1 0 1 2 3 4 5 6 7 8 9 10

2) a) −5   b) 4   c) 7   d) −6

     −10 −9 −8 −7 −6 −5 −4 −3 −2 −1 0 1 2 3 4 5 6 7 8 9 10

B) Answer the questions using the number line below.

     −10 −9 −8 −7 −6 −5 −4 −3 −2 −1 0 1 2 3 4 5 6 7 8 9 10
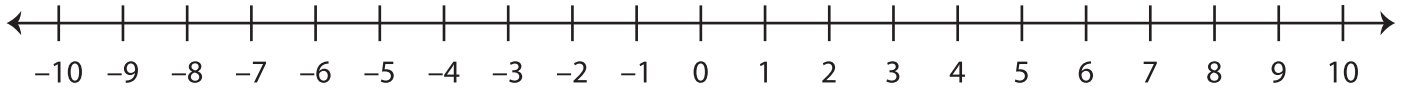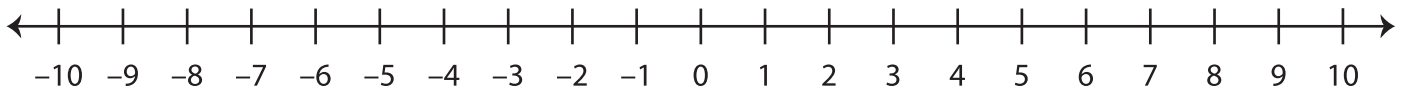
1) 10 units to the right of −1 is _____

2) 4 units to the left of −6 is _____

3) 2 units to the right of 3 is _____

4) 5 units to the left of 0 is _____

5) 8 units to the right of −2 is _____

6) 9 units to the left of 7 is _____

7) 1 unit to the right of −5 is _____

Name : _____

Least Common Multiple

Find the least common multiple for each pair of numbers.

1) 6, 9

   Multiples of 6 : _____

   Multiples of 9 : _____

   LCM(6, 9)   = _____

2) 12, 36

   Multiples of 12 : _____

   Multiples of 36 : _____

   LCM(12, 36) = _____

3) 2, 3

   Multiples of 2 : _____

   Multiples of 3 : _____

   LCM(2, 3)   = _____

4) 20, 4

   Multiples of 20 : _____

   Multiples of 4 : _____

   LCM(20, 4)   = _____

5) 10, 5

   Multiples of 10 : _____

   Multiples of 5 : _____

   LCM(10, 5)   = _____

Name : _____

Least Common Multiple

Find the least common multiple for each pair of numbers.

1) 4, 12

Multiples of 4 : _____

Multiples of 12 : _____

LCM(4, 12)   = _____

2) 18, 24

Multiples of 18 : _____

Multiples of 24 : _____

LCM(18, 24) = _____

3) 3, 9

Multiples of 3 : _____

Multiples of 9 : _____

LCM(3, 9)   = _____

4) 21, 28

Multiples of 21 : _____

Multiples of 28 : _____

LCM(21, 28) = _____

5) 45, 27

Multiples of 45 : _____

Multiples of 27 : _____

LCM(45, 27) = _____

Name : _____

Least Common Multiple

Find the least common multiple for each pair of numbers.

1) 9, 27

   Multiples of 9 : _____

   Multiples of 27 : _____

   LCM(9, 27)   = _____

2) 8, 5

   Multiples of 8 : _____

   Multiples of 5 : _____

   LCM(8, 5)   = _____

3) 6, 4

   Multiples of 6 : _____

   Multiples of 4 : _____

   LCM(6, 4)   = _____

4) 66, 22

   Multiples of 66 : _____

   Multiples of 22 : _____

   LCM(66, 22) = _____

5) 12, 3

   Multiples of 12 : _____

   Multiples of 3 : _____

   LCM(12, 3)   = _____

Value of the Digit

1) Write down the place value of 7 in each of these numbers.

   a) 78.924531   _____   b) 241.35708   _____

   c) 9.7102   _____   d) 54.63817   _____

2) Write down the place value of 3 in each of these numbers.

   a) 3.59216   _____   b) 47.2603   _____

   c) 509.683   _____   d) 81.437659   _____

3) Write down the place value of 6 in each of these numbers.

   a) 750.421836   _____   b) 3.189267   _____

   c) 6.27   _____   d) 49.53768   _____

4) Write down the place value of 1 in each of these numbers.

   a) 278.15346   _____   b) 9.367218   _____

   c) 352.901   _____   d) 61.5429   _____

5) Write down the place value of 4 in each of these numbers.

   a) 2.195624   _____   b) 38.403186   _____

   c) 13.82745   _____   d) 479.65   _____

6) Write down the place value of 8 in each of these numbers.

   a) 9.725418   _____   b) 28.5409   _____

   c) 463.187   _____   d) 1.4538   _____

Value of the Digit

Sheet 2

1) Write down the place value of 4 in each of these numbers.

a) 7.5401 _____

b) 90.628374 _____

c) 413.952 _____

d) 5.30942 _____

2) Write down the place value of 5 in each of these numbers.

a) 39.726415 _____

b) 601.0352 _____

c) 7.81495 _____

d) 5.972138 _____

3) Write down the place value of 9 in each of these numbers.

a) 4.98501 _____

b) 220.671398 _____

c) 13.8965 _____

d) 97.143625 _____

4) Write down the place value of 3 in each of these numbers.

a) 47.095263 _____

b) 3.841905 _____

c) 861.5573 _____

d) 9.326 _____

5) Write down the place value of 7 in each of these numbers.

a) 103.2679 _____

b) 49.352674 _____

c) 8.97142 _____

d) 71.54829 _____

6) Write down the place value of 1 in each of these numbers.

a) 5.901 _____

b) 8.423719 _____

c) 91.056283 _____

d) 602.1389 _____

Value of the Digit

1) Write down the place value of 6 in each of these numbers.

    a) 5.46231   _____   b) 206.859   _____

    c) 48.675132   _____   d) 1.2486   _____

2) Write down the place value of 5 in each of these numbers.

    a) 67.3152   _____   b) 684.950361   _____

    c) 5.86219   _____   d) 79.3815   _____

3) Write down the place value of 1 in each of these numbers.

    a) 104.520   _____   b) 63.1847   _____

    c) 2.41793   _____   d) 7.098216   _____

4) Write down the place value of 4 in each of these numbers.

    a) 1.26374   _____   b) 39.421867   _____

    c) 46.175   _____   d) 502.1480   _____

5) Write down the place value of 9 in each of these numbers.

    a) 6.053279   _____   b) 32.76948   _____

    c) 7.9185   _____   d) 509.837   _____

6) Write down the place value of 3 in each of these numbers.

    a) 59.1473   _____   b) 8.351   _____

    c) 302.98650   _____   d) 1.093245   _____

Value of the Digit

1)   Write down the place value of 1 in each of these numbers.

    a) 403.7981 _____   b) 46.307251 _____

    c) 1.253684 _____   d) 24.81593 _____

2)   Write down the place value of 5 in each of these numbers.

    a) 41.07253 _____   b) 853.4612 _____

    c) 9.134856 _____   d) 3.596 _____

3)   Write down the place value of 9 in each of these numbers.

    a) 5.328419 _____   b) 12.8956 _____

    c) 1.53978 _____   d) 901.763 _____

4)   Write down the place value of 2 in each of these numbers.

    a) 29.30617 _____   b) 1.759423 _____

    c) 798.2431 _____   d) 5.362 _____

5)   Write down the place value of 4 in each of these numbers.

    a) 403.691 _____   b) 81.3475 _____

    c) 5.862714 _____   d) 19.25043 _____

6)   Write down the place value of 6 in each of these numbers.

    a) 5.382167 _____   b) 2.61794 _____

    c) 30.5682 _____   d) 756.293 _____

Value of the Digit

1) Write down the place value of 2 in each of these numbers.

    a) 38.250   _____   b) 9.4267   _____

    c) 81.77692   _____   d) 702.578346 _____

2) Write down the place value of 6 in each of these numbers.

    a) 6.2749   _____   b) 17.59368   _____

    c) 209.768   _____   d) 4.810276   _____

3) Write down the place value of 3 in each of these numbers.

    a) 304.2961   _____   b) 1.342   _____

    c) 98.567432   _____   d) 46.28359   _____

4) Write down the place value of 7 in each of these numbers.

    a) 1.048967   _____   b) 674.5832   _____

    c) 20.176   _____   d) 4.85179   _____

5) Write down the place value of 5 in each of these numbers.

    a) 9.1532   _____   b) 62.849153   _____

    c) 285.3079   _____   d) 340.73581   _____

6) Write down the place value of 8 in each of these numbers.

    a) 85.26907   _____   b) 1.8036   _____

    c) 52.079168   _____   d) 416.982   _____

Name: _____

Multiplying Mixed Numbers and Fractions

Find the product.

1) $1\dfrac{1}{15} \times \dfrac{5}{8}$

2) $\dfrac{1}{2} \times 4\dfrac{1}{2}$

_____

3) $1\dfrac{1}{9} \times \dfrac{17}{10}$

4) $\dfrac{5}{16} \times 2\dfrac{3}{10}$

_____

5) $\dfrac{14}{19} \times 2\dfrac{5}{7}$

6) $2\dfrac{1}{3} \times \dfrac{8}{7}$

_____

7) $3\dfrac{9}{11} \times \dfrac{20}{21}$

8) $\dfrac{4}{3} \times 8\dfrac{3}{18}$

_____

Name: _____

Multiplying Mixed Numbers and Fractions

Find the product.

1) $5\dfrac{3}{5} \times \dfrac{7}{4}$

_____

2) $\dfrac{1}{16} \times 1\dfrac{7}{9}$

_____

3) $\dfrac{11}{24} \times 2\dfrac{6}{11}$

_____

4) $\dfrac{9}{7} \times 4\dfrac{2}{3}$

_____

5) $2\dfrac{7}{16} \times \dfrac{14}{13}$

_____

6) $4\dfrac{4}{5} \times \dfrac{10}{16}$

_____

7) $\dfrac{5}{19} \times 2\dfrac{8}{15}$

_____

8) $3\dfrac{3}{13} \times \dfrac{8}{7}$

_____

Multiplying Mixed Numbers and Fractions

Find the product.

1) $\dfrac{8}{9} \times 2\dfrac{15}{16}$

_____

2) $2\dfrac{7}{10} \times \dfrac{1}{3}$

_____

3) $\dfrac{5}{4} \times 2\dfrac{6}{9}$

_____

4) $6\dfrac{2}{3} \times \dfrac{11}{5}$

_____

5) $\dfrac{3}{4} \times 4\dfrac{7}{12}$

_____

6) $\dfrac{3}{11} \times 2\dfrac{4}{9}$

_____

7) $2\dfrac{4}{6} \times \dfrac{5}{2}$

_____

8) $2\dfrac{2}{3} \times \dfrac{3}{4}$

_____

Multiplying Mixed Numbers and Fractions

Find the product.

1) $8\dfrac{3}{4} \times \dfrac{18}{5}$

_____

2) $\dfrac{12}{19} \times 9\dfrac{3}{6}$

_____

3) $\dfrac{15}{11} \times 7\dfrac{1}{3}$

_____

4) $6\dfrac{2}{4} \times \dfrac{1}{7}$

_____

5) $\dfrac{6}{7} \times 5\dfrac{2}{8}$

_____

6) $2\dfrac{4}{5} \times \dfrac{10}{3}$

_____

7) $4\dfrac{3}{5} \times \dfrac{5}{6}$

_____

8) $\dfrac{3}{2} \times 3\dfrac{1}{11}$

_____

Multiplying Mixed Numbers and Fractions

Find the product.

1) $\dfrac{22}{3} \times 5\dfrac{1}{4}$

_____

2) $1\dfrac{1}{8} \times \dfrac{2}{15}$

_____

3) $3\dfrac{5}{9} \times \dfrac{6}{8}$

_____

4) $\dfrac{12}{8} \times 8\dfrac{1}{2}$

_____

5) $\dfrac{5}{18} \times 2\dfrac{10}{13}$

_____

6) $4\dfrac{1}{2} \times \dfrac{8}{9}$

_____

7) $11\dfrac{2}{3} \times \dfrac{6}{5}$

_____

8) $\dfrac{10}{6} \times 6\dfrac{1}{2}$

_____
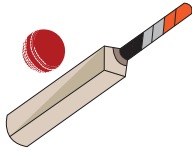
Name : _____

Favourite Sport

A survey was conducted among university students to find their favourite games. Read the data provided in the pictogram below and answer the questions that follow:

Volleyball	Cricket	Football	Tennis	Basketball
660	1728	672	1662	1236

1) Find the ratio of students who like cricket to the students who like tennis.

   _____

2) What is the ratio of the most preferred game to the least preferred game among the university students?

   _____

3) Identify the games preferred by the university students in the ratio of 55 : 56.

   _____

4) Find the ratio of the least favorite sport to all the other sports.

   _____

5) Compare the ratio of students who like basketball to those who prefer football.

   _____
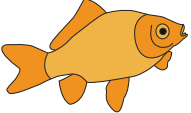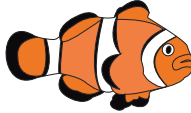
Aquarium Fish

The data represented in the pictogram below displays a variety of aquarium fish sold in one month. Read the data and answer the questions that follow:

Goldfish	Angelfish	Regal Tangs	Clownfish	Starfish
880	126	333	252	672

1) Find the ratio of the number of starfish sold to the number of goldfish sold.

    _____

2) Which two varieties of aquarium fish were sold in the ratio of 2 : 1?

    _____

3) Compare the ratio of regal tangs and starfish sold to the ratio of goldfish that was sold.

    _____

4) What is the ratio of the least number of aquarium fish sold to the highest number of aquarium fish sold? Identify the varieties.

    _____

5) Find the ratio of clownfish sold to all the other varieties of aquarium fish that were sold.

    _____
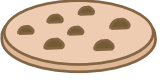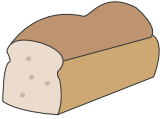
Name : _____

Choco Chips Bakery

The data provided below indicates the sales of a variety of confectioneries over the weekend at La Munchkinierre. Read the data and answer the questions that follow.

Cookies	Brownies	Bread	Doughnuts	Muffins
622	524	248	311	496

1) What is the ratio of brownies to doughnuts ?

   _____

2) Which two bakery items were sold in the ratio of 1 : 2?

   _____

3) Compare the ratio of the cookies sold to all the other bakery items that were sold.

   _____

4) Find the ratio of the most number of bakery items sold to the least number of items that were sold over the weekend.

   _____

5) Can you spot any other equivalent ratios displayed in the data presented, other than the ratio of bread to muffins?

   _____

Name : _____

Division

1)

21 | 7 8, 6 6 0

2)

63 | 9 2, 5 2 6

3)

7 | 8 4, 8 1 9

4)

4 | 2 5, 1 4 5

5)

9 | 6 3, 7 0 2

6)

85 | 1 9, 6 3 4

Name : _____

Division

1)
2 | 1 7, 2 2 6

2)
55 | 7 2, 5 8 5

3)
78 | 5 3, 1 0 1

4)
34 | 4 8, 4 3 3

5)
6 | 3 9, 8 1 4

6)
10 | 6 0, 7 2 0

Name : _____

Division

1)

47 | 4 8, 9 0 1

2)

8 | 9 1, 4 8 8

3)

16 | 3 5, 3 3 7

4)

5 | 5 6, 2 5 0

5)

92 | 2 3, 5 4 2

6)

3 | 8 7, 1 9 9

Name : _____

Five-Number Summary

Write the five-number summary for each set of data.

1) 42, 58, 67, 55, 40, 69, 66, 51, 46, 48, 68

    Minimum : _____

        Q_1 : _____

        Q_2 : _____

        Q_3 : _____

    Maximum : _____

2) 14, 11, 8, 1, 23, 20, 17, 5, 19, 10, 12, 22

    Minimum : _____

        Q_1 : _____

        Q_2 : _____

        Q_3 : _____

    Maximum : _____

3) 107, 92, 111, 119, 99, 100, 89, 94, 125, 93

    Minimum : _____

        Q_1 : _____

        Q_2 : _____

        Q_3 : _____

    Maximum : _____

4) 72, 60, 64, 75, 79, 63, 70, 61, 78

    Minimum : _____

        Q_1 : _____

        Q_2 : _____

        Q_3 : _____

    Maximum : _____

5) 21, 4, 18, 9, 25, 16, 27, 30, 33, 15, 31

    Minimum : _____

        Q_1 : _____

        Q_2 : _____

        Q_3 : _____

    Maximum : _____

6) 134, 47, 122, 113, 49, 56, 102, 93, 62

    Minimum : _____

        Q_1 : _____

        Q_2 : _____

        Q_3 : _____

    Maximum : _____

Name : _____

Five-Number Summary

Write the five-number summary for each set of data.

1)   122, 79, 92, 84, 105, 128, 99, 131, 74

   Minimum **:** _____

   Q_1 **:** _____

   Q_2 **:** _____

   Q_3 **:** _____

   Maximum **:** _____

2)   66, 94, 82, 91, 87, 98, 80, 93, 66, 94

   Minimum **:** _____

   Q_1 **:** _____

   Q_2 **:** _____

   Q_3 **:** _____

   Maximum **:** _____

3)   8, 11, 58, 32, 9, 50, 27, 10, 29, 5, 7, 22

   Minimum **:** _____

   Q_1 **:** _____

   Q_2 **:** _____

   Q_3 **:** _____

   Maximum **:** _____

4)   137, 28, 36, 120, 49, 45, 65, 119

   Minimum **:** _____

   Q_1 **:** _____

   Q_2 **:** _____

   Q_3 **:** _____

   Maximum **:** _____

5)   68, 93, 76, 46, 96, 72, 86, 52, 77, 68

   Minimum **:** _____

   Q_1 **:** _____

   Q_2 **:** _____

   Q_3 **:** _____

   Maximum **:** _____

6)   27, 12, 3, 1, 6, 31, 34, 28, 19, 14, 23

   Minimum **:** _____

   Q_1 **:** _____

   Q_2 **:** _____

   Q_3 **:** _____

   Maximum **:** _____

Five-Number Summary

Write the five-number summary for each set of data.

1) 26, 19, 16, 30, 9, 7, 10, 22, 15, 31, 34, 13

Minimum : _____

Q$_1$: _____

Q$_2$: _____

Q$_3$: _____

Maximum : _____

2) 76, 105, 116, 88, 76, 122, 84, 116

Minimum : _____

Q$_1$: _____

Q$_2$: _____

Q$_3$: _____

Maximum : _____

3) 35, 87, 69, 39, 63, 82, 71, 90, 39

Minimum : _____

Q$_1$: _____

Q$_2$: _____

Q$_3$: _____

Maximum : _____

4) 27, 4, 33, 6, 21, 47, 52, 2, 4, 24, 30

Minimum : _____

Q$_1$: _____

Q$_2$: _____

Q$_3$: _____

Maximum : _____

5) 122, 160, 89, 42, 89, 115, 71, 48

Minimum : _____

Q$_1$: _____

Q$_2$: _____

Q$_3$: _____

Maximum : _____

6) 37, 66, 72, 85, 81, 98, 22, 15, 10, 83

Minimum : _____

Q$_1$: _____

Q$_2$: _____

Q$_3$: _____

Maximum : _____

Name : _____

Surface Area of Solids using Nets

Count the unit squares, and find the surface area of the shape represented by each net.

$\square$ = 1 cm²

1) Rectangular Prism
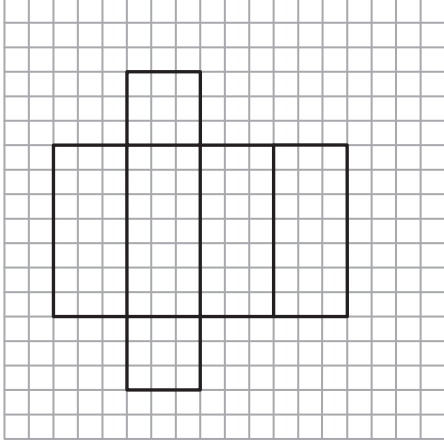
Surface Area = _____

2) Cube
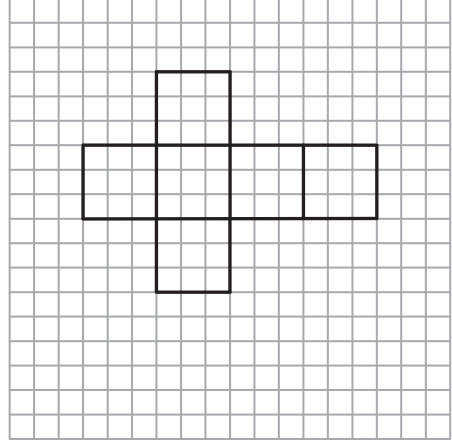
Surface Area = _____

3) Rectangular Prism
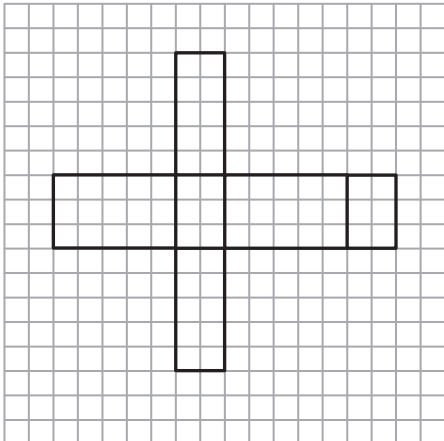
Surface Area = _____

4) Rectangular Prism
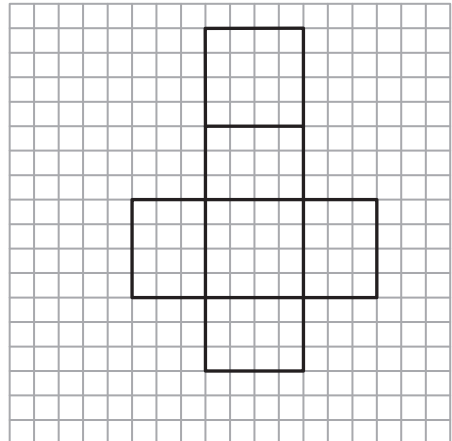
Surface Area = _____

5) Cube
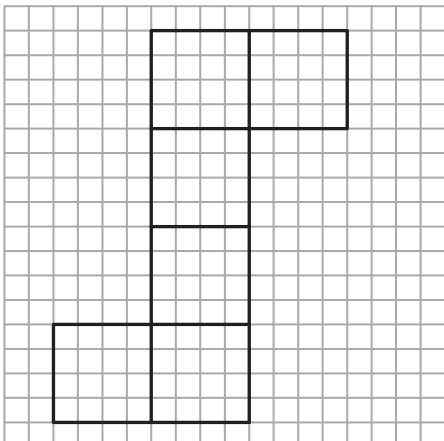
Surface Area = _____

6) Triangular Prism

Surface Area = _____

Surface Area of Solids using Nets

Count the unit squares, and find the surface area of the shape represented by each net.

□ = 1 m²

1) Rectangular Prism
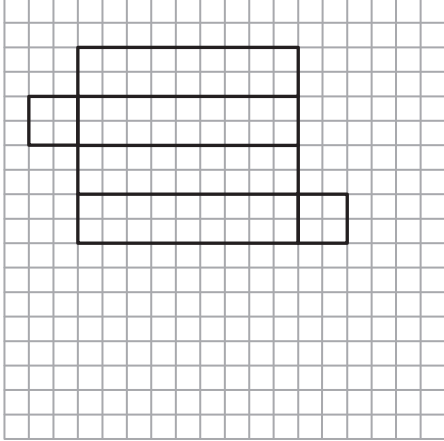
Surface Area = _____

2) Rectangular Prism
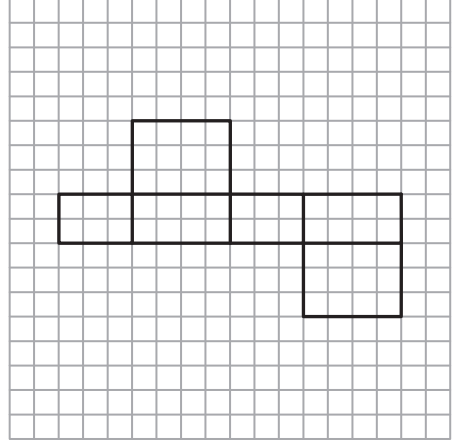
Surface Area = _____

3) Cube
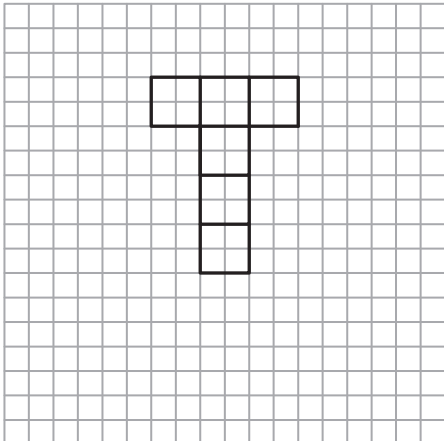
Surface Area = _____

4) Triangular Prism
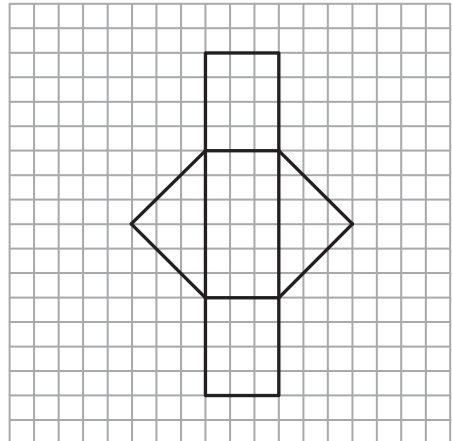
Surface Area = _____

5) Triangular Prism
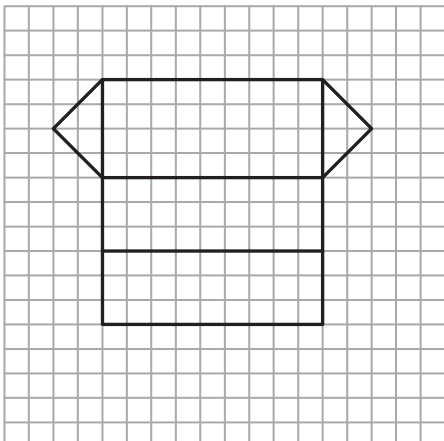
Surface Area = _____

6) Rectangular Prism
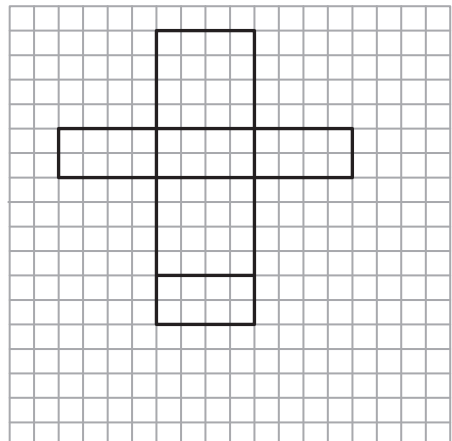
Surface Area = _____

Name : _____

Surface Area of Solids using Nets

Count the unit squares, and find the surface area of the shape represented by each net.

□ = 1 mm²

1) Cube
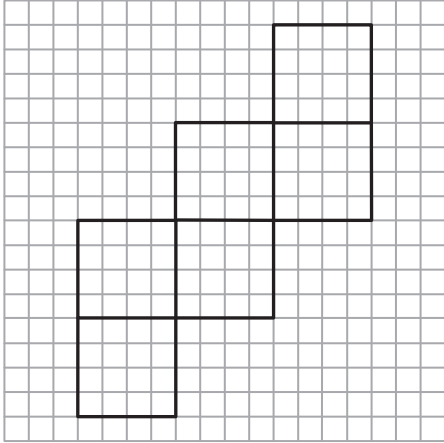
Surface Area = _____

2) Triangular Prism
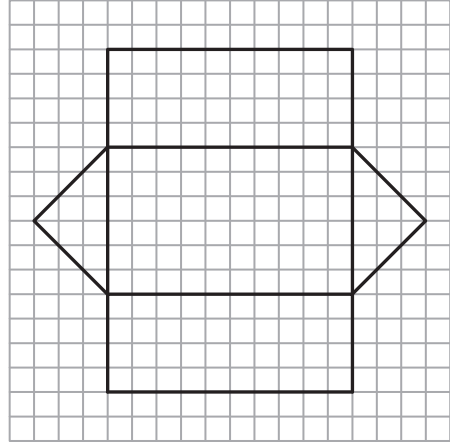
Surface Area = _____

3) Triangular Prism
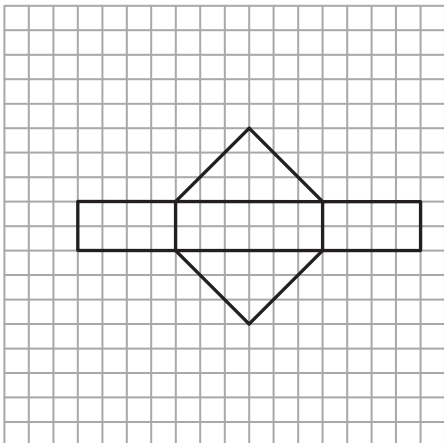
Surface Area = _____

4) Rectangular Prism
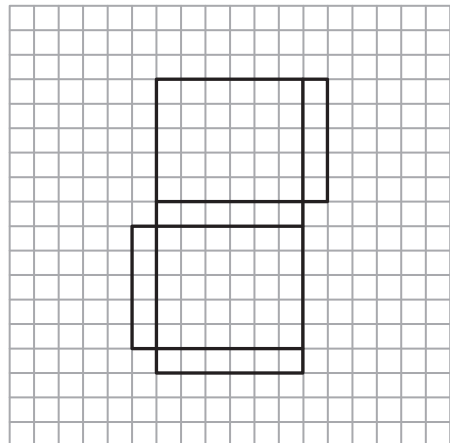
Surface Area = _____

5) Rectangular Prism
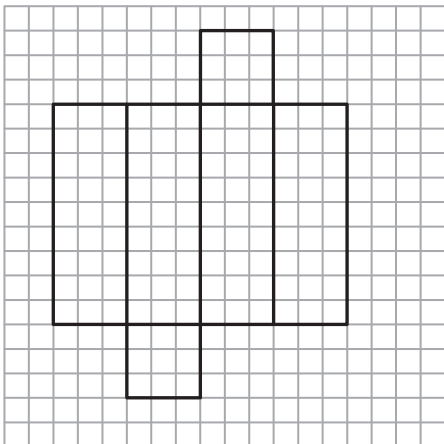
Surface Area = _____

6) Cube

Surface Area = _____

Quadrants & Axes

Write the points belong to each quadrant or axis.

I - quadrant : _____

II - quadrant : _____

III - quadrant : _____

IV - quadrant : _____

On x-axis : _____

On y-axis : _____

Quadrants & Axes

Write the points belong to each quadrant or axis.

I - quadrant : _____

II - quadrant : _____

III - quadrant : _____

IV - quadrant : _____

On x-axis : _____

On y-axis : _____

Quadrants & Axes

Write the points belong to each quadrant or axis.

I - quadrant : _____

II - quadrant : _____

III - quadrant : _____

IV - quadrant : _____

On x-axis : _____

On y-axis : _____

Quadrants & Axes

Write the points belong to each quadrant or axis.

I - quadrant : _____

II - quadrant : _____

III - quadrant : _____

IV - quadrant : _____

On x-axis : _____

On y-axis : _____

Quadrants & Axes

Write the points belong to each quadrant or axis.

I - quadrant : _____

II - quadrant : _____

III - quadrant : _____

IV - quadrant : _____

On x-axis : _____

On y-axis : _____

Name : _____

One-Step Equations: Shapes

Solve each problem.

1) ABCD is a kite with AB = AD = 3 m and CD = CB = 8 m. Find the values of p and q.
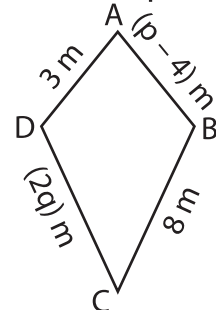
p = _____   q = _____

2) In the given circle, O is the center and OU is the radius, which measures 15 cm. Find the value of n.
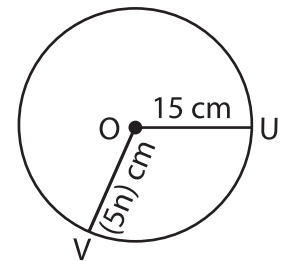
n = _____

3) PQRS is a right trapezoid. The side PS measures 7 mm. If a perpendicular ST is drawn from the vertex S to the base QR, find the value of b and determine the length of QR.
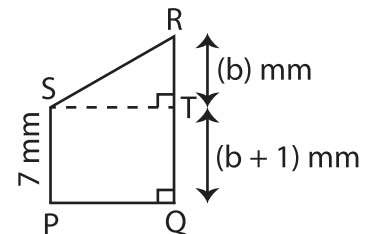
b = _____   QR = _____

4) EFGH is a isosceles trapezoid. If FG is 35 m, find x.
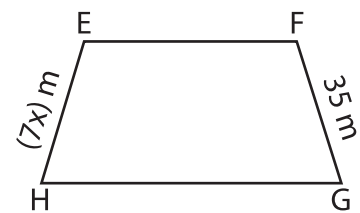
x = _____

5) XYZ is an equilateral triangle, where each side measures 22 mm. Find the value of u.
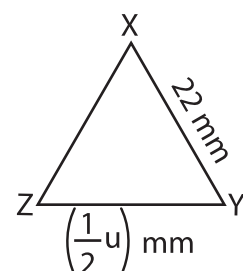
u = _____

Name : _____

One-Step Equations: Shapes

Solve each problem.

1) EFGH is a square. If EF is 9 mm, find the value of x.

E —— 9 mm —— F

(3x) mm

H _____ G
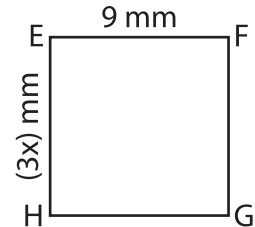
x = _____

2) STU is a triangle. TV is a median that bisects the side SU. If SV = 12 cm, find b.

T

S —— 12 cm —— V (−2 + b) cm —— U
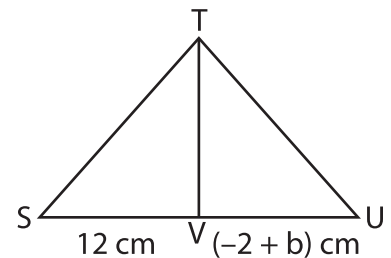
b = _____

3) ABCD is a parallelogram where the diagonals bisect each other with O as the center. Given that OA = 20 m, OC = (10t) m and OD = (14 + t) m. Find the value of t and determine the length of OB.

D —— C
(14 + t) m O (10t) m
20 m
A —— B
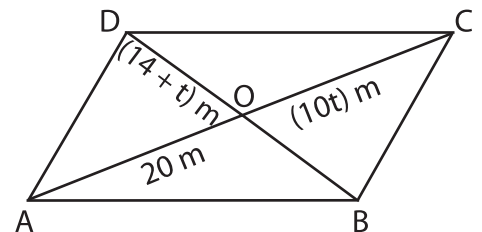
t = _____   OB = _____

4) PQRS is a rectangle whose diagonals are equal in length. Given that SQ = 15 cm and PR = $\left(\dfrac{3}{2} r\right)$ cm, find the value of r.

P —— Q
O
$\frac{3}{2}r$ cm
15 cm
S —— R
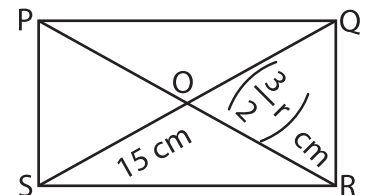
r = _____

5) In the given semi-circle, XZ is the diameter and O is the center. If OX = 17 m, find p.

O
X —— 17 m —— (p + 11) m —— Z

p = _____
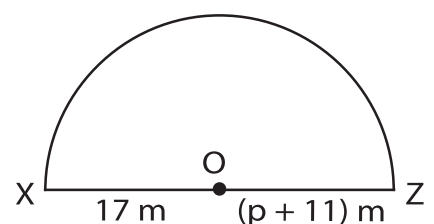
One-Step Equations: Shapes

Solve each problem.

1) PQRS is a trapezoid where the heights PA and QB are equal. If PA = 16 cm, find the value of u.
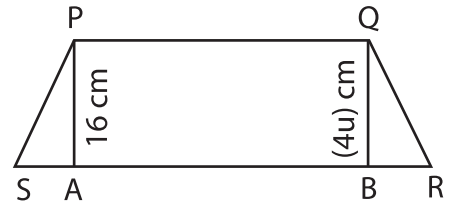
   u = _____

2) ABCD is a rhombus. If CD = 18 m, find the value of z.
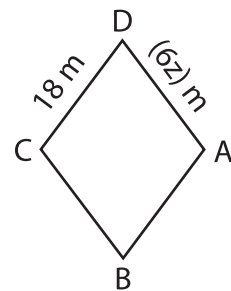
   z = _____

3) KLMN is a rectangle. MN = 17 cm, LM = 12 cm. Find the values of x and y.
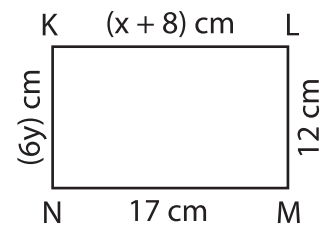
   x = _____   y = _____

4) XYZ is an isosceles triangle where XY and XZ are equal. If XY = 10 mm, find the value of n.
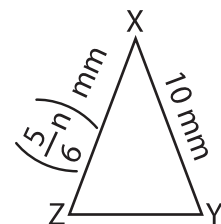
   n = _____

5) STUV is a kite where OT = OV. The length of OV is 14 m. Find the value of g and determine the length of SU.

   g = _____   SU = _____
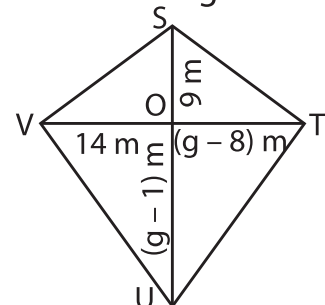
One-Step Equations: Shapes

Solve each problem.

1) In the given semi-circle, AB is the diameter and O is the center. If AO = 21 m, find q.

    q = _____

    A   21 m   O (q + 10) m B
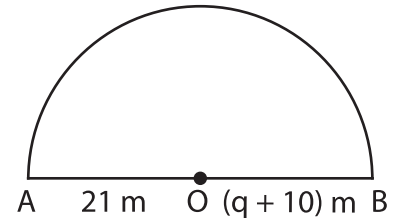
2) EFGH is a quadrilateral. The side EH measures 3 mm. If a perpendicular HD is drawn from the vertex H to the base FG, find the value of z and determine the length of FG.
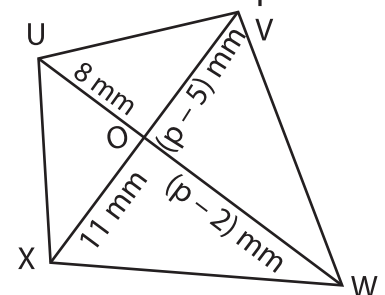
    z = _____   FG = _____

    G
    (z) mm
    H   D
    3 mm
    (z + 1) mm
    E   F
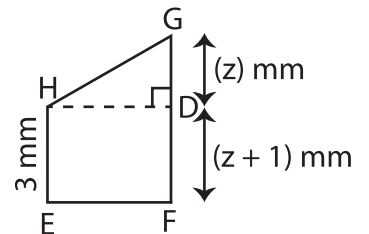
3) PQR is an isosceles triangle where PQ and PR are equal. If PQ = 16 cm, find the value of t.

    t = _____

    P
    $\left(\frac{4}{5}t\right)$ cm   16 cm
    R   Q
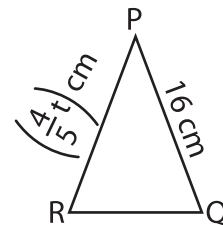
4) UVWX is a kite where OV = OX. The length of OX is 11 mm. Find the value of p and determine the length of UW.

    p = _____   UW = _____

    U   V
    8 mm   (p – 5) mm
    O
    11 mm   (p – 2) mm
    X
    W

5) KLMN is a rectangle whose diagonals bisect each other. Given that LN = 20 m and MK = $\left(\frac{5}{6}y\right)$ m, find the value of y.

    y = _____

    K   L
    O $\left(\frac{5}{6}y\right)$ m
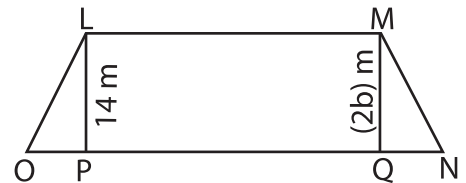   20 m
    N   M
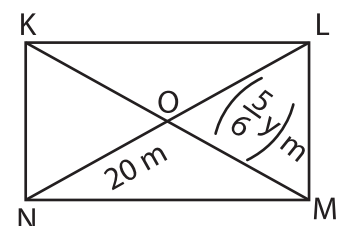
One-Step Equations: Shapes

Solve each problem.

1) RSTU is a parallelogram where the diagonals bisect each other with O as the center. Given that OR = 18 mm, OT = (9t) mm and OU = (15 + t) mm. Find the value of t and determine the length of OS.
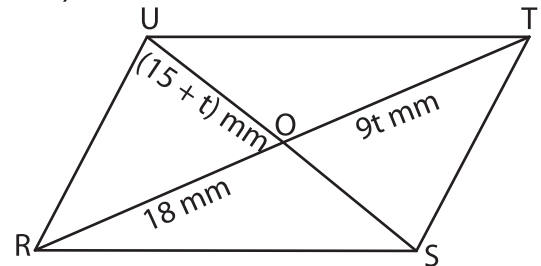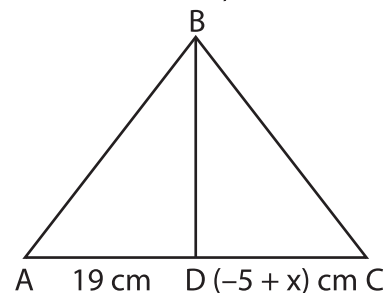
t = _____   OS = _____

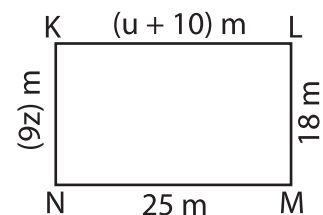2) LMNO is a trapezium where the heights LP and MQ are equal. If LP = 14 m, find the value of b.

b = _____

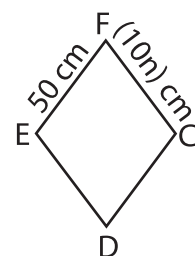3) ABC is a triangle. BD is a median that bisects the side AC. If AD = 19 cm, find x.

x = _____

4) KLMN is a rectangle. MN = 25 m, LM = 18 m. Find the values of u and z.

u = _____   z = _____
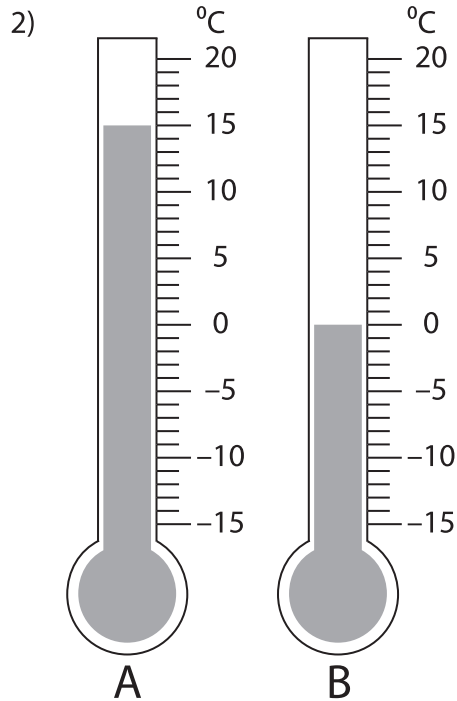
5) CDEF is a rhombus. If EF = 50 cm, find the value of n.

n = _____

Name : _____

Score : _____

Comparing temperatures - Thermometer

Sheet 1

Compare each pair of thermometers and choose the correct answer.

1)

°C
38
36
34
32
30
28
26
24
22
20

A

°C
38
36
34
32
30
28
26
24
22
20

B
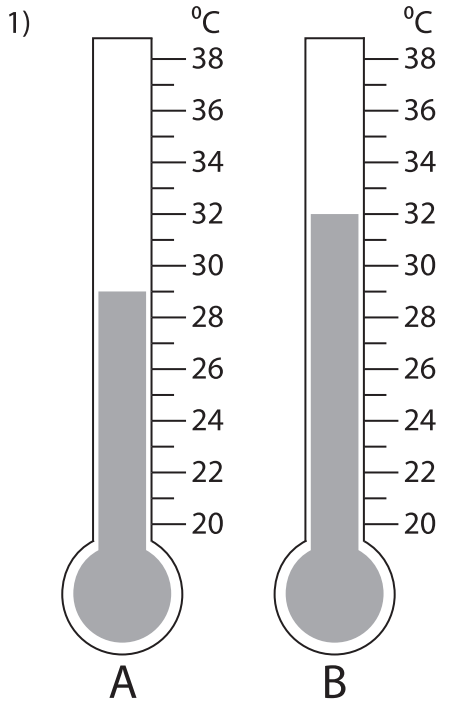
☐ A reads a higher temperature than B
☐ A reads a lower temperature than B

2)

°C
20
15
10
5
0
−5
−10
−15

A

°C
20
15
10
5
0
−5
−10
−15

B

☐ A reads a higher temperature than B
☐ B reads a higher temperature than A

3)

°C
99
96
93
90
87
84
81
78
75
72

A

°C
99
96
93
90
87
84
81
78
75
72

B

☐ B reads a lower temperature than A
☐ A reads a lower temperature than B

4)

°C
−45
−50
−55
−60
−65
−70

A

°C
−45
−50
−55
−60
−65
−70

B

☐ A reads a higher temperature than B
☐ B reads a higher temperature than A

5)

°C
48
44
40
36
32
28
24
20
16

A

°C
48
44
40
36
32
28
24
20
16

B

☐ B reads a lower temperature than A
☐ A reads a lower temperature than B

6)

°C
0
−10
−20
−30
−40
−50
−60

A

°C
0
−10
−20
−30
−40
−50
−60

B

☐ B reads a lower temperature than A
☐ B reads a higher temperature than A

Name : _____

Score : _____

Comparing temperatures - Thermometer

Sheet 2

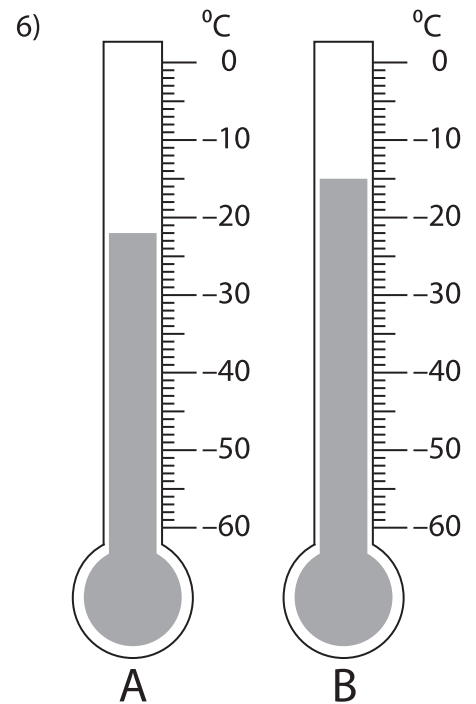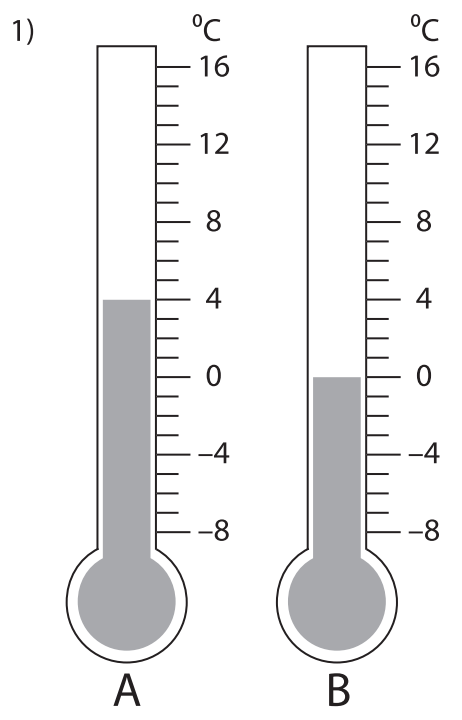Compare each pair of thermometers and choose the correct answer.

1)

☐ B reads a lower temperature than A

☐ A reads a lower temperature than B

2)

☐ B reads a lower temperature than A

☐ B reads a higher temperature than A

3)

☐ B reads a higher temperature than A

☐ A reads a higher temperature than B

4)

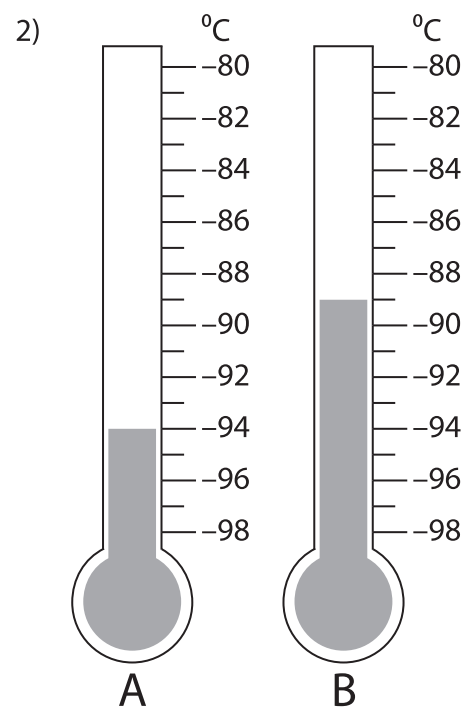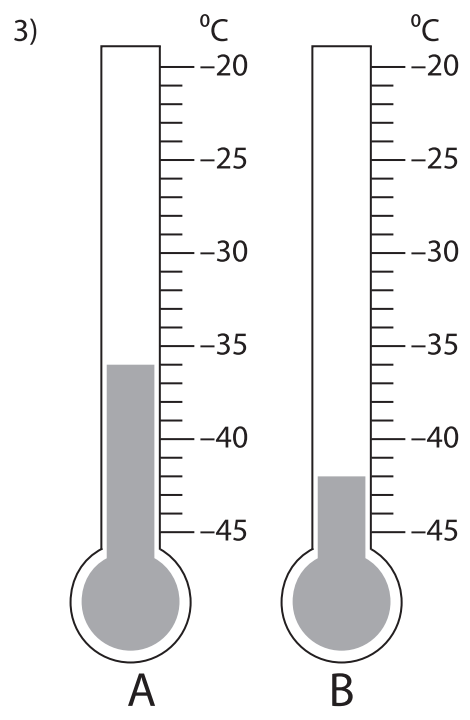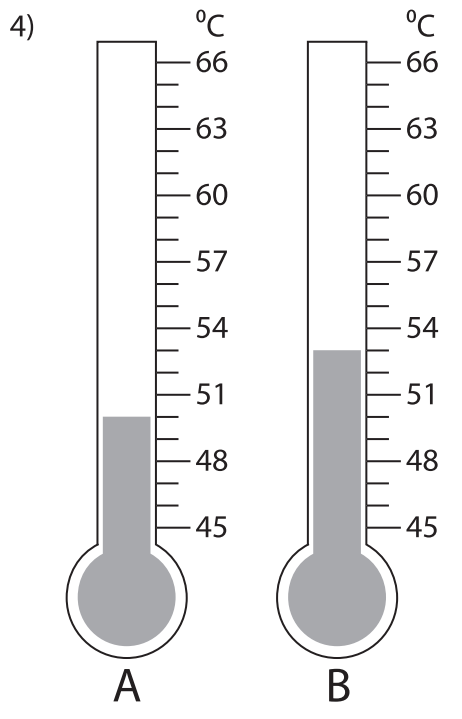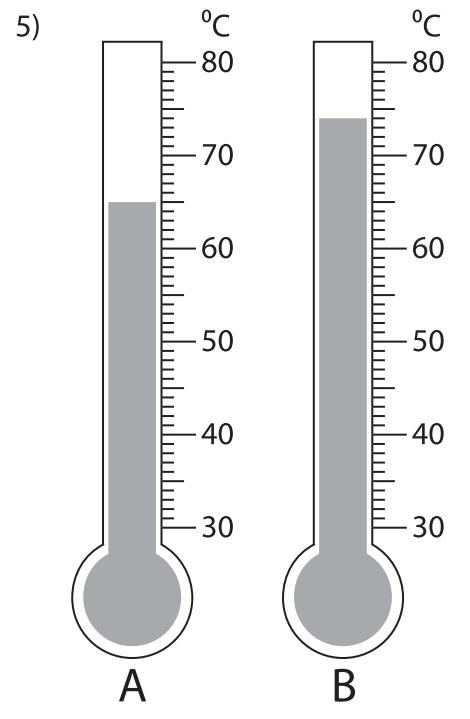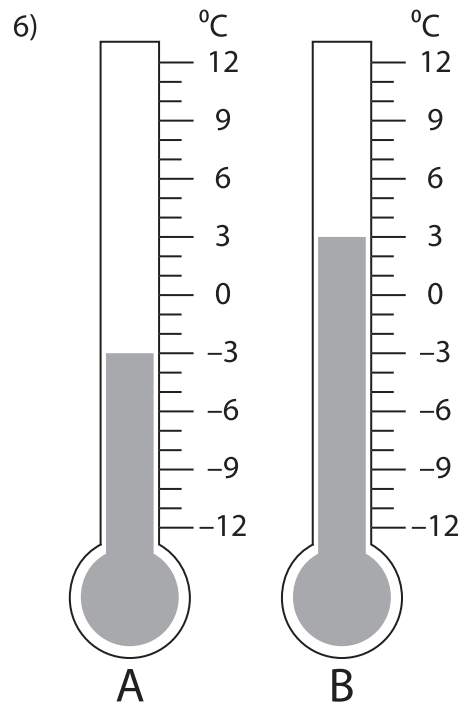☐ B reads a lower temperature than A

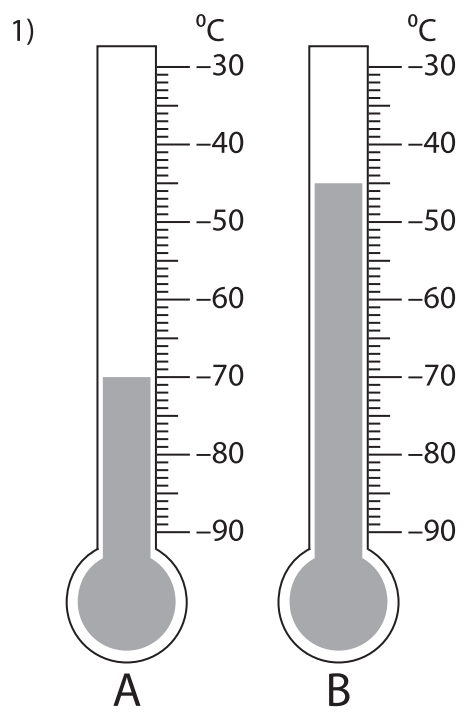☐ A reads a lower temperature than B

5)

☐ A reads a higher temperature than B
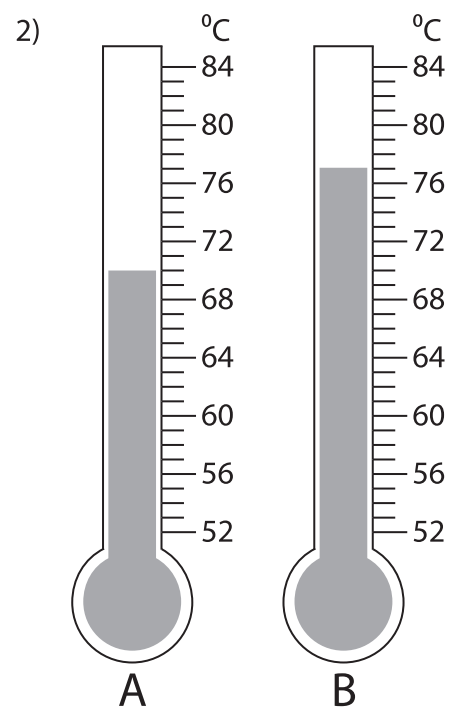
☐ B reads a higher temperature than A

6)

☐ A reads a lower temperature than B

☐ A reads a higher temperature than B
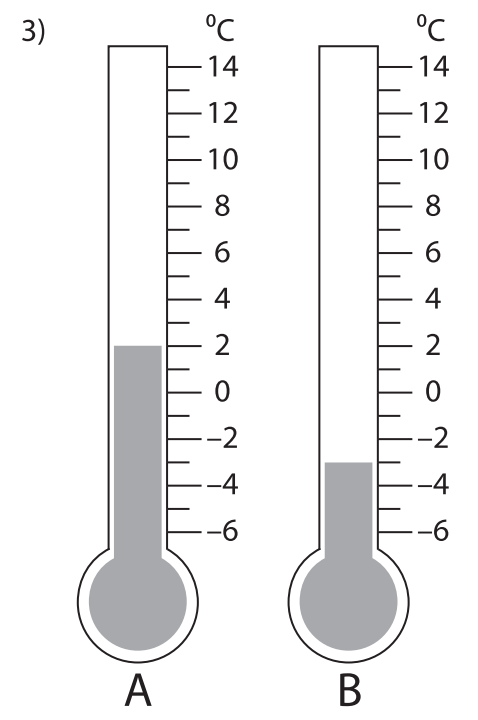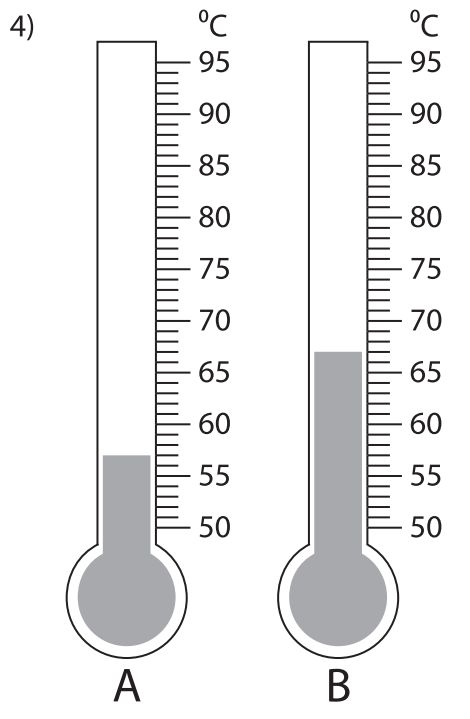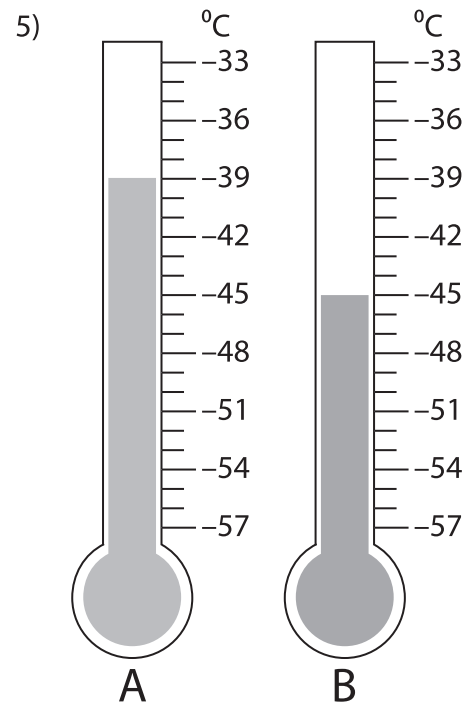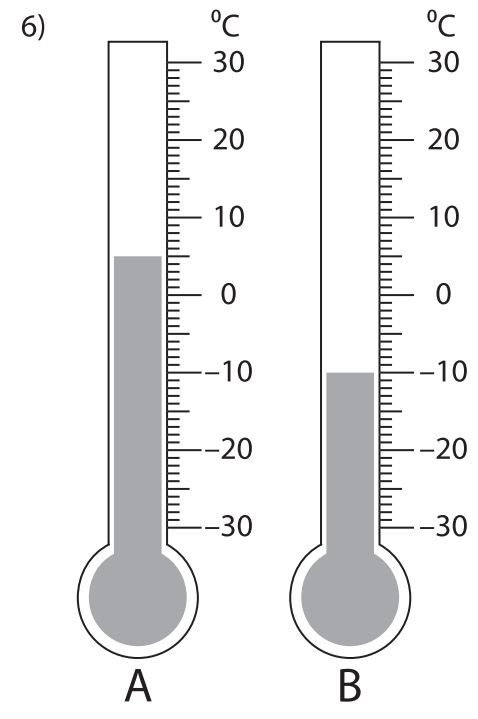
Name : _____

Comparing temperatures - Thermometer
Sheet 3

Compare each pair of thermometers and choose the correct answer.

1)

°C A: -30, -40, -50, -60, -70, -80, -90
°C B: -30, -40, -50, -60, -70, -80, -90

A   B

☐ B reads a higher temperature than A
☐ A reads a higher temperature than B

2)

°C A: 84, 80, 76, 72, 68, 64, 60, 56, 52
°C B: 84, 80, 76, 72, 68, 64, 60, 56, 52

A   B

☐ A reads a lower temperature than B
☐ B reads a lower temperature than A

3)

°C A: 14, 12, 10, 8, 6, 4, 2, 0, -2, -4, -6
°C B: 14, 12, 10, 8, 6, 4, 2, 0, -2, -4, -6

A   B

☐ A reads a lower temperature than B
☐ A reads a higher temperature than B

4)

°C A: 95, 90, 85, 80, 75, 70, 65, 60, 55, 50
°C B: 95, 90, 85, 80, 75, 70, 65, 60, 55, 50

A   B

☐ B reads a higher temperature than A
☐ B reads a lower temperature than A

5)

°C A: -33, -36, -39, -42, -45, -48, -51, -54, -57
°C B: -33, -36, -39, -42, -45, -48, -51, -54, -57

A   B

☐ B reads a higher temperature than A
☐ A reads a higher temperature than B

6)

°C A: 30, 20, 10, 0, -10, -20, -30
°C B: 30, 20, 10, 0, -10, -20, -30

A   B

☐ B reads a lower temperature than A
☐ A reads a lower temperature than B

Listing the factors

List out all possible factors for each number.

1) 150

_____

_____

2) 86

_____

_____

3) 72

_____

_____

4) 144

_____

_____

5) 834

_____

_____

6) 55

_____

_____

7) 116

_____

_____

8) 38

_____

_____

9) 64

_____

_____

10) 548

_____

_____

Listing the factors

DS2

List out all possible factors for each number.

1)   999

_____

_____

2)   46

_____

_____

3)   104

_____

_____

4)   210

_____

_____

5)   84

_____

_____

6)   464

_____

_____

7)   728

_____

_____

8)   56

_____

_____

9)   610

_____

_____

10)   225

_____

_____

Listing the factors

DS3

List out all possible factors for each number.

1) 812

_____

_____

2) 48

_____

_____

3) 94

_____

_____

4) 625

_____

_____

5) 340

_____

_____

6) 242

_____

_____

7) 984

_____

_____

8) 76

_____

_____

9) 536

_____

_____

10) 100

_____

_____

Number Line Addition

Indicate hops on each number line and complete the addition sentences.
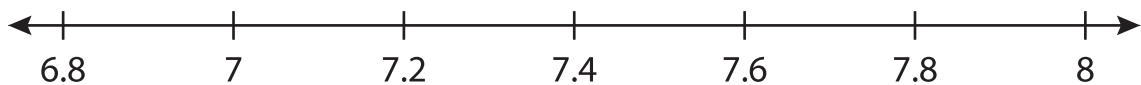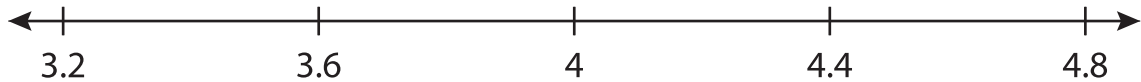
1)   8.36   +   0.6   = _____
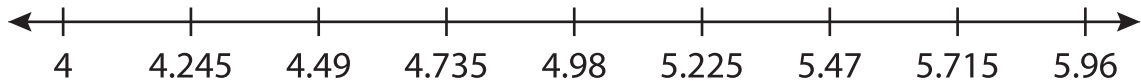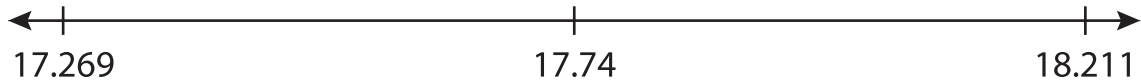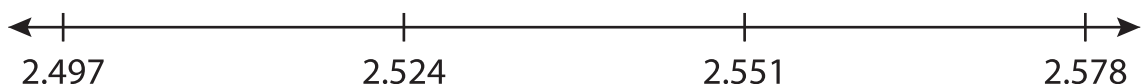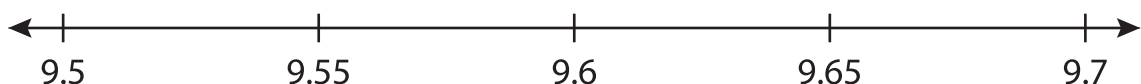
```
←—|————————|————————|————————|————————|————————|—→
 8.36      8.48      8.6      8.72      8.84      8.96
```

2)   4.245   +   0.98   = _____

```
←—|——————|——————|——————|——————|——————|——————|——————|—→
  4      4.245  4.49  4.735  4.98  5.225  5.47  5.715  5.96
```

3)   17.74   +   0.471   = _____

```
←—|————————————————|————————————————|—→
 17.269            17.74            18.211
```

4)   6.8   +   1.2   = _____

```
←—|————————|————————|————————|————————|————————|————————|—→
 6.8       7        7.2      7.4      7.6      7.8       8
```

5)   2.524   +   0.054   = _____

```
←—|————————————|————————————|————————————|—→
 2.497         2.524         2.551        2.578
```

6)   9.5   +   0.2   = _____

```
←—|————————|————————|————————|————————|—→
 9.5       9.55     9.6      9.65     9.7
```

Number Line Addition

Indicate hops on each number line and complete the addition sentences.
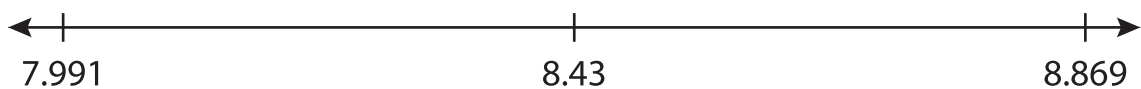
1)   3.6   +   0.8   = _____

```
←———|————————|————————|————————|————————|———→
   3.2        3.6        4        4.4       4.8
```

2)   6.345   +   0.46   = _____

```
←——|——————|——————|——————|——————|——————|——————|——————|——→
  6.23  6.345  6.46  6.575  6.69  6.805  6.92  7.035
```

3)   3.5   +   1.5   = _____

```
←——|——————|——————|——————|——————|——————|——————|——————|——→
   3    3.25   3.5   3.75    4    4.25   4.5   4.75   5
```

4)   7.991   +   0.439   = _____

```
←—|———————————————————|———————————————————|—→
 7.991                8.43                8.869
```

5)   9.724   +   2.5   = _____

```
←——|——————|——————|——————|——————|——————|——————|——→
  9.724  10.224  10.724  11.224  11.724  12.224  12.724
```

6)   12.78   +   3   = _____

```
←——|———————————————|———————————————|———————————————|——→
  12.78          13.78           14.78           15.78
```
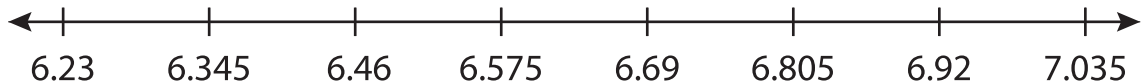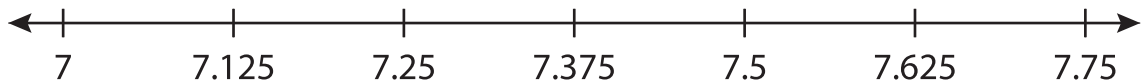
Name : _____

Number Line Addition

Indicate hops on each number line and complete the addition sentences.

1)   7   +   0.625   =   _____
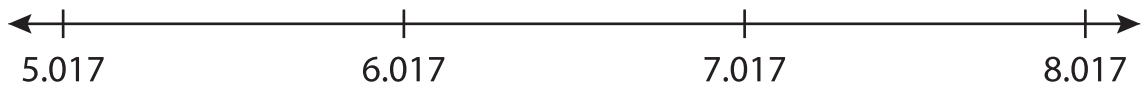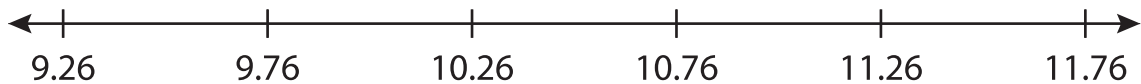
```
←—+——+——+——+——+——+——+——→
  7    7.125   7.25   7.375   7.5   7.625   7.75
```
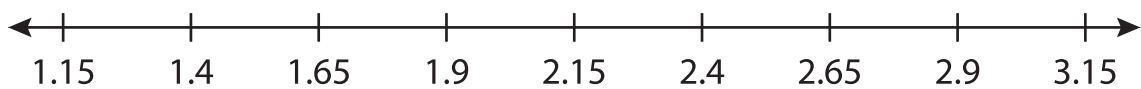
2)   5.017   +   3   =   _____

```
←—+———————+———————+———————+——→
 5.017         6.017         7.017         8.017
```

3)   9.76   +   1.5   =   _____

```
←—+——————+——————+——————+——————+——————+——→
 9.26    9.76    10.26   10.76   11.26   11.76
```

4)   1.15   +   2   =   _____

```
←—+——+——+——+——+——+——+——+——→
 1.15  1.4  1.65  1.9  2.15  2.4  2.65  2.9  3.15
```

5)   14.2   +   0.6   =   _____

```
←—+———————+———————+———————+———————+——→
 13.9        14.2       14.5        14.8        15.1
```

6)   7.755   +   0.86   =   _____

```
←—+——————+——————+——————+——————+——————+——————+——→
 7.325   7.54   7.755   7.97   8.185   8.4   8.615   8.83
```
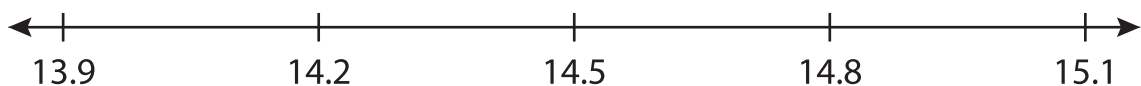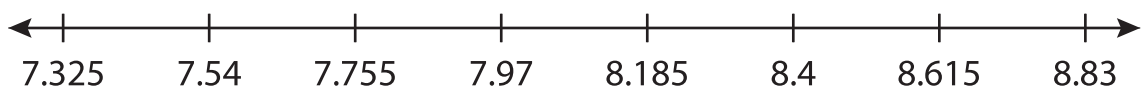
Name : _____

Ratio: Dividing into Parts

Find the share of each part.

1) Divide $50 in the ratio 2 : 3.

_____

2) Divide 81 m in the ratio 5 : 4.

_____

3) Divide 105 g in the ratio 8 : 7.

_____

4) Divide 49 cm in the ratio 1 : 6.

_____

5) Divide 72 mL in the ratio 4 : 5.

_____

6) Divide 121 km in the ratio 9 : 2.

_____

7) Jace gave $100 to her daughter Kailey and asked her to spend three parts and save two parts of the total amount. How much did Kailey spend and how much did she save?

_____

Name : _____

Ratio: Dividing into Parts

Find the share of each part.

1) Divide 169 cm in the ratio 5 : 8.

        _____

2) Divide 77 L in the ratio 9 : 2.

        _____

3) Divide 90 mg in the ratio 7 : 2.

        _____

4) Divide $14 in the ratio 2 : 5.

        _____

5) Divide 36 m in the ratio 3 : 6.

        _____

6) Divide 25 dm in the ratio 4 : 1.

        _____

7) The ages of Andrea and Emma are in the ratio 1 : 7. If the sum of their ages is 80, what would be Andrea's age and Emma's age?

        _____
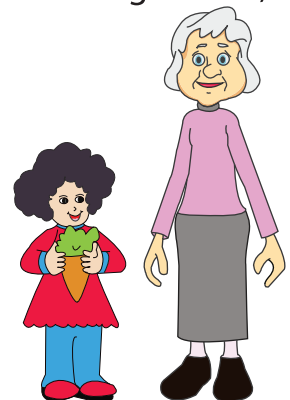
Ratio: Dividing into Parts

Find the share of each part.

1) Divide 45 ¢ in the ratio 6 : 3.

_____

2) Divide 156 mm in the ratio 4 : 8.

_____

3) Divide 28 mL in the ratio 8 : 6.

_____

4) Divide 88 g in the ratio 7 : 4.

_____

5) Divide 100 dm in the ratio 1 : 9.

_____

6) Divide 63 L in the ratio 5 : 2.

_____

7) The total weight of a white rhino calf and a common hippo calf is 96 kg. If the weight of white rhino calf to the weight of common hippo calf is in the ratio 2 : 1, find the weight of white rhino calf and the weight of common hippo calf?

_____
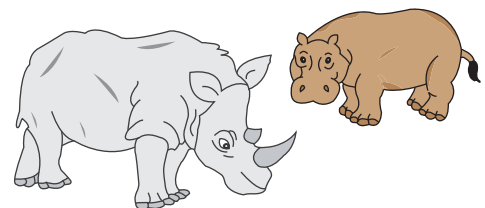
Name : _____

Division

1) The Hogwarts library has 15,852 reference books arranged in 6 racks equally. How many books does each rack hold?

_____

2) Jeremy withdrew $1,000 from his account. On his way home, he stopped at the local grocer's shop and exchanged the $1,000 bill for $5 bills. How many five dollar bills did Jeremy receive from the grocer?

_____

3) The E.T. parking facility at Universal Studios, Hollywood can accomodate up to 5,000 vehicles at a time. If the parking structure is 8 levels tall, how many vehicles can be parked on each level?

_____
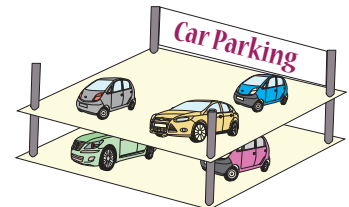
4) Gina is employed by the Wilsons as a full-time babysitter. If she earns a total of $2,296 a month, how much will she earn in a week?

_____

5) A ski resort is spread over 5,288 acres. The resort is split equally into 4 key areas. How many acres will each key area comprise of?

_____
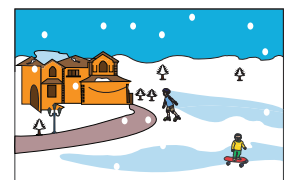
Name : _____

Division

1) Five making lines in a chocolate factory can churn out 10,000 tons of liquid chocolate in a year. How many tons of liquid chocolate can one making line in the chocolate factory produce in a year?
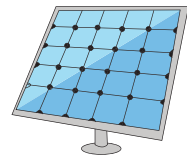
_____
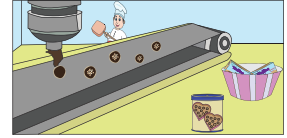
2) The Disney's All-Star Movies Resort at Orlando, FL has a total of 1,920 rooms spread over four floors. How many rooms does each floor have?
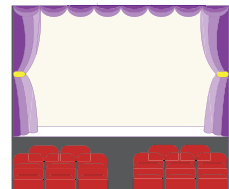
_____
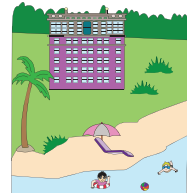
3) Heather installed solar panels in her home. The total consumption of electricity in the month of June 2016 was 1,200 kWh. Calculate the average consumption of electricity per week for the month of June.

_____

4) The Big Bang Theater has a total seating capacity of 2,160 equally spread over 9 screens. How many seats can each screen accomodate?

_____

5) Mike, John, and Ryan collectively spent $93,381 on their international holiday. They decide to split the expenses equally. What is the amount each person should contribute for a fair sharing of costs?
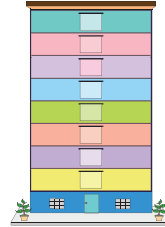
_____

Name : _____

Division

1) Nina and Betty rented an apartment near Downtown Los Angeles. If they paid $11,460 towards rent for the first quarter, how much are they charged for each month by the landlord?

_____

2) A ranch in Texas has a total of 1,266 horses. If they are sheltered equally in 6 barns, how many horses are housed in one barn?

_____
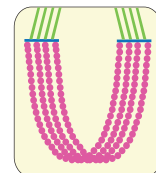
3) An orchard yields 1,463 apples in August 2016. They are packed into 7 boxes and delivered to a nearby supermarket. How many apples does each box contain?

_____

4) Anne uses 1,008 beads to make stranded necklaces for 9 of her friends. How many beads did Anne use for each necklace she made?

_____

5) A courier company delivers 1,456 packages in 8 days. If they delivered equal number of packages on all days, how many packages were delivered each day?

_____

Stem-and-Leaf Plot

1)   The data for the production of number of components at an industry for three weeks are given below. Make a stem-and-leaf plot.

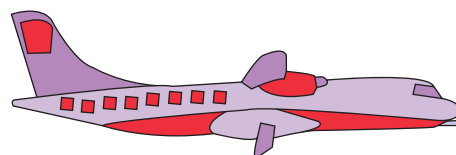56, 22, 45, 24, 13, 39, 15, 34, 26, 45, 51, 18, 38, 26, 55

Stem	Leaf

Key : 5|5 = _____

2)   The data for air traffic in ten days at a busy airport is recorded as follows. Make a stem-and-leaf plot for the given data.

293, 287, 309, 306, 295, 288, 285, 294, 306, 281

Stem	Leaf

Key : 29|5 = _____

Stem-and-Leaf Plot

1) The duration of ten marketing calls (in seconds) made by Jim from his office to various customers are recorded below. Make a stem-and-leaf plot.

334, 310, 321, 312, 335, 326, 344, 329, 344, 346

Stem	Leaf

Key : 31|0 = _____

2) The data for steel rods (in tonnes) required for the construction of fifteen eight-storey flats are listed below. Make a stem-and-leaf plot.

93, 82, 74, 87, 89, 62, 65, 73, 85, 80, 76, 94, 79, 69, 73

Stem	Leaf
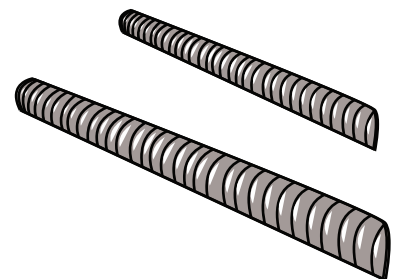
Key : 9|3 = _____

Stem-and-Leaf Plot

1) Maria's backyard has a lot of trees. The ages of trees in years are given below. Make a stem-and-leaf plot.

6.7, 7.1, 5.3, 4.7, 7.8, 5.7, 4.2, 6.2, 5.9, 5.4, 7.5, 4.6, 7.9, 6.1, 4.7

Stem	Leaf

Key : 7|5 = _____

2) Mark and his friends played a car race on his new gaming console. The time (in seconds) required for them to cover 10 laps are recorded below. Make a stem-and-leaf plot of the data.

705, 720, 711, 714, 725, 708, 713, 707, 716, 722, 706, 716

Stem	Leaf
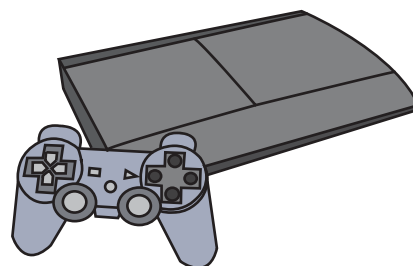
Key : 70|8 = _____

Name : _____

Volume - Cube
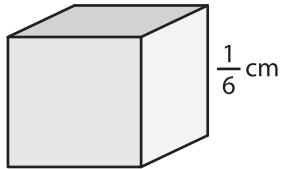
A) Find the volume of each cube.

1)

$\frac{1}{6}$ cm

Volume = _____

2)

$2\frac{2}{3}$ m

Volume = _____

3)

$\frac{7}{2}$ mm
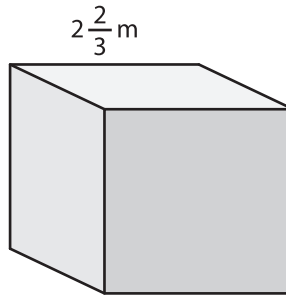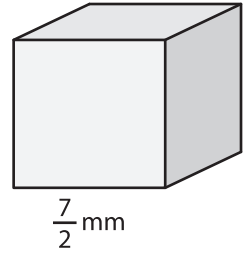
Volume = _____

B) Find the volume of each cube from the given side length.

4) side length = $\frac{4}{9}$ cm

Volume = _____

5) side length = $\frac{6}{5}$ m

Volume = _____

6) side length = $\frac{5}{7}$ mm

Volume = _____

7) side length = $1\frac{1}{8}$ cm

Volume = _____

8) If a side of an ice cube measures $2\frac{2}{3}$ cm, what is the total volume of 27 such ice cubes?

_____

Name : _____

Volume - Cube
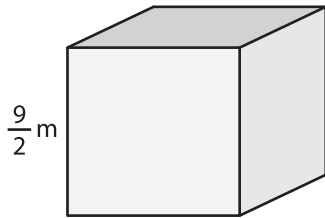
A) Find the volume of each cube.

1)

$\frac{9}{2}$ m

Volume = _____

2)

$\frac{2}{9}$ mm

Volume = _____

3)

$1\frac{2}{3}$ cm
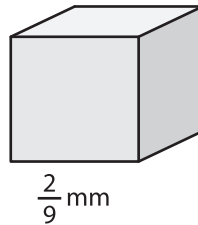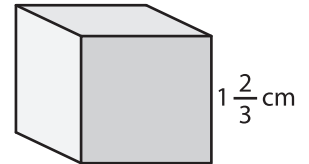
Volume = _____

B) Find the volume of each cube from the given side length.

4) side length = $1\frac{1}{4}$ m

Volume = _____

5) side length = $\frac{3}{5}$ mm

Volume = _____

6) side length = $\frac{7}{6}$ cm

Volume = _____

7) side length = $\frac{5}{8}$ m

Volume = _____

8) How much space does a $\frac{1}{4}$ -m cubical gift box have?
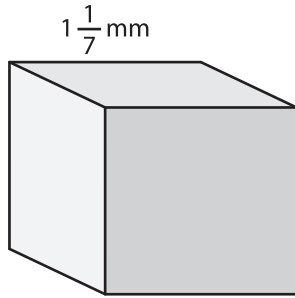
_____

Volume - Cube

A) Find the volume of each cube.

1)

$1\frac{1}{7}$ mm

Volume = _____

2)

$\frac{9}{4}$ cm

Volume = _____

3)

$\frac{3}{8}$ m
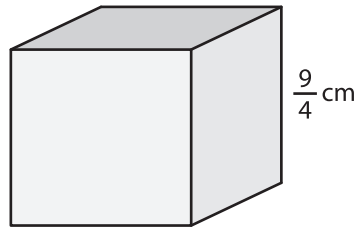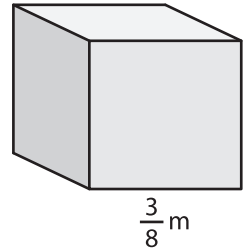
Volume = _____

B) Find the volume of each cube from the given side length.

4) side length = $\frac{5}{6}$ mm

Volume = _____

5) side length = $\frac{1}{9}$ cm

Volume = _____

6) side length = $2\frac{1}{3}$ m

Volume = _____

7) side length = $\frac{9}{5}$ mm

Volume = _____

8) Shawn pieces a large cube together from 25 metal cubes. The side length of each metal cube is $\frac{3}{2}$ cm. Find the volume of the large cube thus formed.

_____

Perimeter of a Rectangle

A) Find the perimeter of each rectangle for the given measurements.

1) length = 4.3 m, width = 2.1 m

    Perimeter = _____

2) width = 10.7 cm, length = 12.8 cm

    Perimeter = _____

3) width = 1.5 mm, length = 2.7 mm
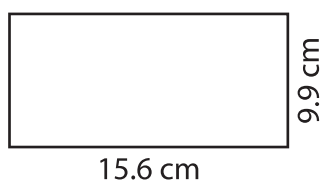
    Perimeter = _____

4) length = 8.9 m, width = 5.2 m

    Perimeter = _____

B) Find the perimeter of each rectangle.
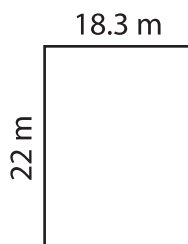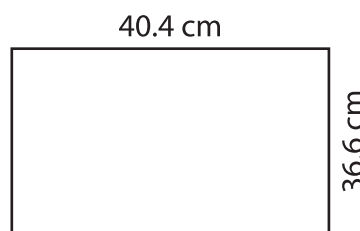
5)

9.9 cm

15.6 cm

    Perimeter = _____

6)

32.5 mm

24.4 mm

    Perimeter = _____

7)

18.3 m

22 m

    Perimeter = _____

8)

40.4 cm

36.6 cm

    Perimeter = _____

9) The length and the width of a rectangle are 16.1 mm and 7 mm respectively. Determine the perimeter of the rectangle.

    _____

Perimeter of a Rectangle

A) Find the perimeter of each rectangle for the given measurements.

1) width = 12.7 cm, length = 35.8 cm

    Perimeter = _____

2) length = 6.4 mm, width = 5 mm

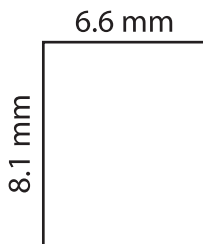   Perimeter = _____

3) length = 24.3 m, width = 21.8 m

    Perimeter = _____

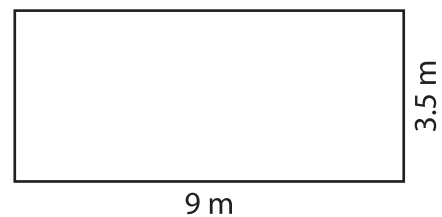4) width = 4.1 cm, length = 17.7 cm

    Perimeter = _____

B) Find the perimeter of each rectangle.
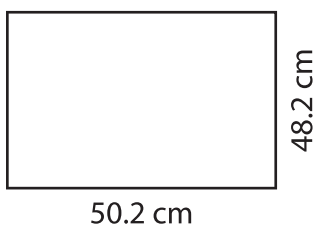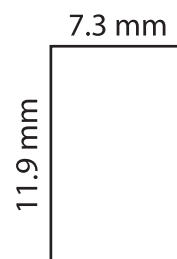
5)

6.6 mm

8.1 mm

    Perimeter = _____

6)

3.5 m

9 m

    Perimeter = _____

7)

48.2 cm

50.2 cm

    Perimeter = _____

8)

7.3 mm

11.9 mm

    Perimeter = _____

9) A rectangle has a length of 33.6 m and a width of 28.4 m. What is the perimeter of the rectangle?

    _____

Name : _____

Perimeter of a Rectangle

A) Find the perimeter of each rectangle for the given measurements.

1) length = 13.4 mm, width = 9.6 mm

Perimeter = _____

2) width = 2.7 m, length = 3.2 m
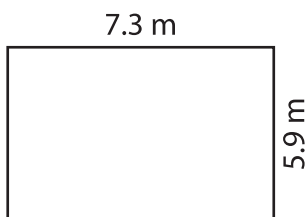
Perimeter = _____

3) length = 36.5 cm, width = 29.5 cm

Perimeter = _____
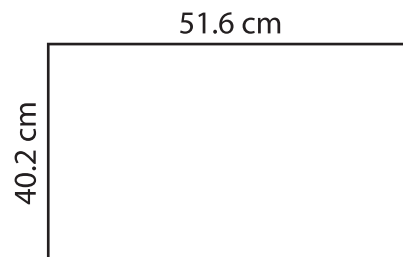
4) width = 60 mm, length = 78.7 mm

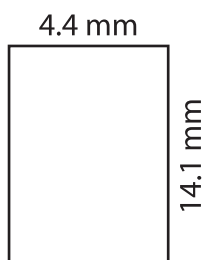Perimeter = _____

B) Find the perimeter of each rectangle.

5)

7.3 m

5.9 m

Perimeter = _____

6)

51.6 cm

40.2 cm

Perimeter = _____

7)

4.4 mm

14.1 mm

Perimeter = _____

8)

10.8 m

3.3 m

Perimeter = _____

9) The width and the length of a rectangle are 1.1 cm and 2 cm respectively. Find the perimeter of the rectangle.

_____

Perimeter of a Rectangle

A) Find the perimeter of each rectangle for the given measurements.

1) width = 30 m, length = 43.5 m

    Perimeter = _____

2) length = 10.4 mm, width = 8.3 mm

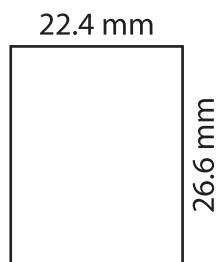   Perimeter = _____

3) width = 4.8 cm, length = 7.2 cm

    Perimeter = _____

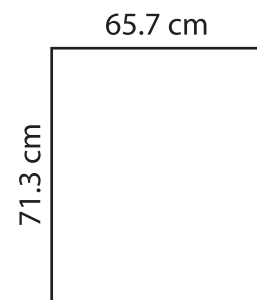4) length = 34.1 m, width = 25.5 m

    Perimeter = _____

B) Find the perimeter of each rectangle.
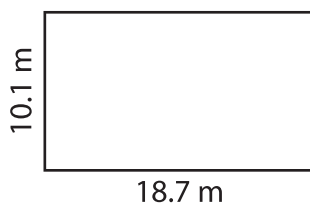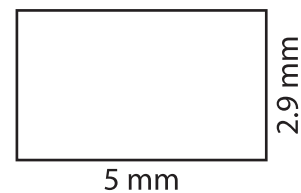
5)

22.4 mm

26.6 mm

Perimeter = _____

6)

65.7 cm

71.3 cm

Perimeter = _____

7)

10.1 m

18.7 m

Perimeter = _____

8)

2.9 mm

5 mm

Perimeter = _____

9) What is the perimeter of the rectangle, if its width and length are 47.2 cm and 53.5 cm respectively?

_____

Name : _____

Perimeter of a Rectangle

A) Find the perimeter of each rectangle for the given measurements.

1)   length = 8.7 mm, width = 3.1 mm   2)   length = 78.1 cm, width = 67.3 cm

       Perimeter = _____   Perimeter = _____

3)   width = 7.7 m, length = 16 m   4)   width = 6.2 mm, length = 9.3 mm

       Perimeter = _____   Perimeter = _____

B) Find the perimeter of each rectangle.

5)

       32.2 cm

       23 cm

       Perimeter = _____

6)

       5.8 m

       1.9 m

       Perimeter = _____

7)

       6.5 mm

       4.6 mm

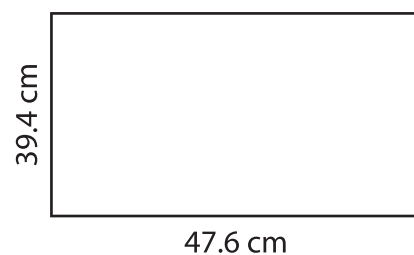   Perimeter = _____

8)

       39.4 cm

       47.6 cm
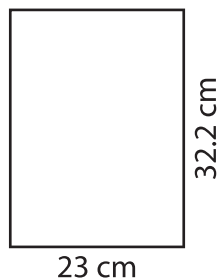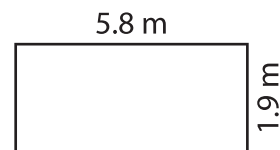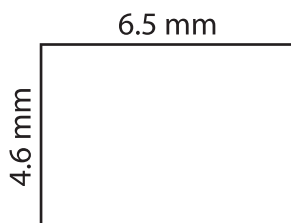
       Perimeter = _____

9) Find the perimeter of the rectangle whose length is 63 m and width is 54.5 m.

       _____