Term 3 │ Assessment 1

Add & Subtract | Multiplication, Grouping & Sharing
Fractions and Money | Patterns and Functions

Section A | Addition and Subtraction

1. Write down the value of each underlined digit.
    a) 1̲2 ……… b) 9̲2̲ ……… c) 1̲8̲3 ……… d) 6̲18 ……… e) 45̲7̲ ………

2. My units digit is a five and my tens digit is a 7. What number am I? …………

3. Write the given numbers from the smallest to the biggest.

    $43, 47, 74, 34, 44.$ ……………………………………………………

4. I am the odd number between 99 and 95. Who am I? ……………

5. Write in short form: a) $6T + 9U + 5U =$ ……………………………

                            b) $3U + 8H + 5T =$ ……………………………

                            c) $1T + 6H =$ ……………………………………

6. Round each of the following numbers off to the nearest 10.
    a) $12 \approx$ ………   b) $25 \approx$ ………   c) $257 \approx$ ………   d) $466 \approx$ ………

7. a) Find the sum of 35 and 28.   b) Subtract 38 from 60.

8. Calculate:
    a) $465 + 343$ b) $547 - 385$

9. The sum of two numbers is 17.
    The one number is 8. The other number = …………………………………………

10. There are 25 marbles in one bag and 8 more marbles in another bag.
     How many marbles are in both bags? …………………………………………

11. Gary wants to buy a new jersey that costs R390.
     He has R250 and saves another R85.
     How much more does he need to save to buy the jersey?

     …………………………………………………………………………………………

Section B │ Multiplication, Grouping & Sharing

1. Fill in the first ten multiples of 8.

	1	2	3	4	5	6	7	8	9	10
× 8										

2. Write the multiples of 9 between 20 and 60. …………………………………………

3. Complete:

    a) $12 \div 4 =$ …… b) $32 \div 8 =$ …… c) $27 \div 3 =$ …… d) $56 \div 7 =$ ……

4. Mark each correct answer with a "✓".
   If the answer is incorrect, write the correct answer.

a) 3 fives = 15   …… b) Double 16 = 32 …… c) 20 ÷ 4 = 6 ……

d) Half of 11 = 6½ …… e) 6 eights = 68   …… f) 6 × 0 = 60   ……

5. Use the "bracket" method to calculate:

    a) 5×13 b) 4×25

    $= 5 \times ($………$+$………$)$ $= 4 \times ($……… $+$ ………$)$

    $=$ …………………… $=$ ……………………

    $=$ …………………… $=$ ……………………

    $=$ …………………… $=$ ……………………

6. Complete using the vertical column method.

   a)   14   b)   12   c)   24   d)   29
      × 6   × 9   × 3   × 4
   _____   _____   _____   _____

   _____   _____   _____   _____

   _____   _____   _____   _____

7. Complete: *Write your answers out using either method.*

   a) $36 \div 3$ b) $72 \div 2$ c) $45 \div 3$ d) $72 \div 4$

8. There are 17 books in one box.
   How many books will there be in 8 of these boxes? ……………………………

9. One bag of tomatoes cost R26.
   The cost of 3 bags of tomatoes = …………………………………………………………

10. Margie has a 20m long cord.
    How many 3m pieces of cord will she be able to cut from it?

    ………………………………………………………………………………………………………

11. Share 15 apples equally between two people.

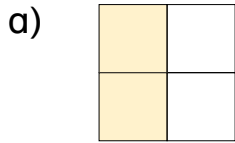   Each person gets …………………… apples.

12. Three bags of sugar cost R84.
    What is the cost of 1 bag of sugar?

                        ………………………………………………………

Section C | Fractions and Money
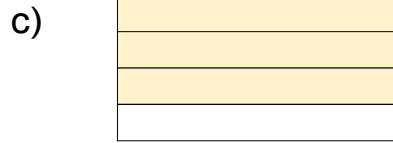
1. Explain why 3 quarters is bigger than 1 quarter.

   ………..

2. Write down what fraction of each whole figure is shaded.

   a)

   …………………….

   or …………………….

   b)

   …………………….

   or …………………….

   c)

   …………………….

   d)

   …………………….

   or …………………….

   e)

   …………………….

   f)

   …………………….
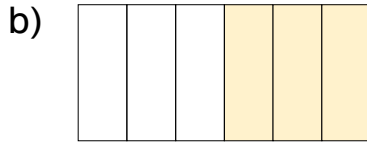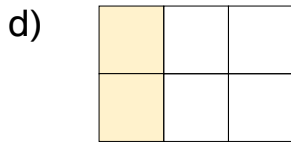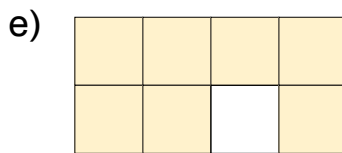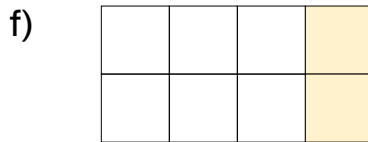
   or …………………….

3. Complete:

   a) $\frac{1}{3}$ of 12   b) $\frac{1}{4}$ of 8   c) $\frac{1}{6}$ of 24   d) $\frac{1}{8}$ of 80

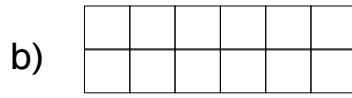   = …………….   = …………….   = …………….   = …………….
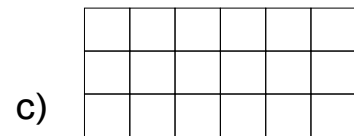
4. Shade the given fractional part of each rectangle:

   a)

   1 quarter
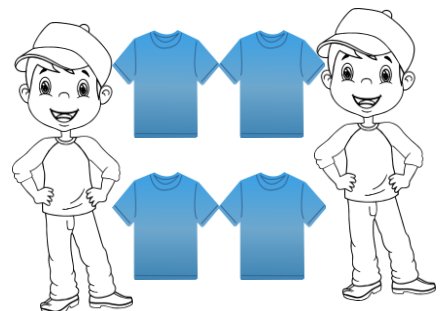
   b)

   1 third

   c)
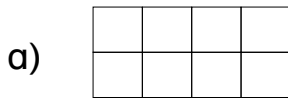
   1 half

5. David uses 1 fifth of a 20kg bag of flour.

   How much flour did he use? …………………….

6. Share four t-shirts equally between 2 boys.
   What fraction of the t-shirts does each boy get?

   ……………………. or …………………….

7. Fill in $>$, $<$ or $=$ between each pair of fractions to make correct statements.

a) 1 half ☐ 1 quarter   b) 2 quarters ☐ 1 half   c) 3 eighths ☐ 1 half

8. There are 2 cows, 5 goats and 1 horse in a field.
   What fraction of the animals are:

   a) cows?   ……………… or ………………

   b) goats?   ……………………………………

   c) horses? ……………………………………

9. Six cupcakes are shared equally between 3 girls.

   Each girl gets …………… or …………… of the cupcakes, in fraction form.

10. John spent R7,50 at the tuckshop. He paid with a R5 and two R2 coins.

    How much change did he receive? …………………………………………………

12. Mother bought 6 small bread rolls for 50c each.
    How much did she spend? …………………………………………………………

13. The price for a pack of three pencils is R12,60.
    What is the price of one pencil? …………………………………………………

14. If two sweets cost R5, calculate the price of:

    a) 1 sweet. ……………………………   b) 3 sweets. ……………………………

15. How many of each of the following coins have the same value as R4?

    a)   b)   *c)   *d)

    ………………   ………………   ………………   ………………

16. What fraction is R2 of R6? ……………………………………………………………

Section D | Patterns and Functions

1. Write down the next 3 numbers in each. Fill in the rule that you used.

    a)   5 ; 8 ; 11 ; …………………………   Rule: …………

    b)   50 ; 46 ; 42 ; …………………………   Rule: …………

    c)   20 ; 18 ; 16 ; …………………………   Rule: …………

    d)   75 ; 78 ; 81 ; …………………………   Rule: …………

2. Write down the next 5 numbers in each.

  a) 180 ; 185 ; 190 ; …………………………………………………

  b) 220 ; 218 ; 216 ; …………………………………………………

  c) 120 ; 140 ; 160 ; …………………………………………………

  d) 800 ; 750 ; 700 ; …………………………………………………

  e) 836 ; 736 ; 636 ; …………………………………………………

3. Draw the next two diagrams:
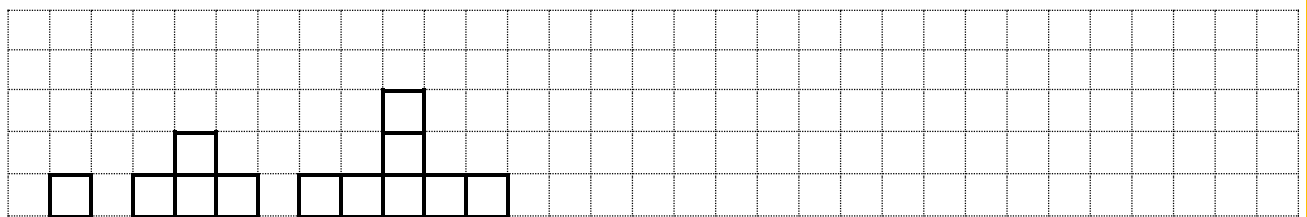
4. Describe the pattern in words and then draw it one more time.

    The pattern is …………………………………………………………………………

Term 3 | Assessment 1 Answers

Add & Subtract | Multiplication, Grouping & Sharing
Fractions and Money | Patterns and Functions

Section A | Addition and Subtraction

1. Write down the value of each underlined digit.

   a) 1<u>2</u> 10   b) 9<u>2</u> 2   c) 1<u>8</u>3 80   d) <u>6</u>18 600   e) 45<u>7</u> 7

2. My units digit is a five and my tens digit is a 7. What number am I? 75

3. Write the given numbers from the smallest to the biggest.

   43 , 47 , 74 , 34 , 44.   34 , 43 , 44 , 47 , 74.

4. I am the odd number between 99 and 95. Who am I? 97

5. Write in short form: a) 6T + 9U + 5U = 60 + 14 = 74

   b) 3U + 8H + 5T = 853

   c) 1T + 6H = 610

6. Round each of the following numbers off to the nearest 10.

   a) 12 ≈ 10   b) 25 ≈ 30   c) 257 ≈ 260   d) 466 ≈ 470

7. a) Find the sum of 35 and 28. 63   b) Subtract 38 from 60. 22

5	+	8	=	1	3
30	+	20	=	5	0
35	+	28	=	6	3

10	–	8	=		2
50	–	30	=	2	0
60	–	38	=	2	2

8. Calculate:

   a) 465 + 343   b) 547 − 385

5	+	3	=			8
60	+	40	=	1	0	0
400	+	300	=	8	0	0
465	+	343	=	8	0	8

7	–	5	=			2
140	–	80	=		6	0
400 500	–	300	=	1	0	0
547	–	385	=	1	6	2

9. The sum of two numbers is 17. $8 + \_\_ = 17 \rightarrow 17 - 8 = 9$
   The one number is 8. The other number $= 9$

10. There are 25 marbles in one bag and 8 more marbles in another bag.
    How many marbles are in the second bag? $25 + 8 = 33$
    How many marbles are in both bags? $25 + 33 = 58$

11. Gary wants to buy a new jersey that costs R390.
    He has R250 and saves another R85. Total = R250 + R85 = R335
    How much more does he need to save to buy the jersey?
    Money still needed = R390 − R335 = **R55**

Section B | Multiplication, Grouping & Sharing

1. Fill in the first ten multiples of 8.

	1	2	3	4	5	6	7	8	9	10
× 8	8	16	24	32	40	48	56	64	72	80

2. Write the multiples of 9 between 20 and 60. ~~10~~ 27 , 36 , 45 , 54. ~~60~~

3. Complete:

   a) $12 \div 4 = 3$ b) $32 \div 8 = 4$ c) $27 \div 3 = 9$ d) $56 \div 7 = 8$

4. Mark each correct answer with a "✓".
   If the answer is incorrect, write the correct answer.

   a) 3 fives = 15   ✓   b) Double 16 = 32 ✓   c) 20 ÷ 4 = 6   5

   d) Half of 11 = 6½ 5½   e) 6 eights = 68   48   f) 6 × 0 = 60   0

5. Use the "bracket" method to calculate:

   a) 5 × 13
       $= 5 × (10 + 3)$
       $= (5 × 10) + (5 × 3)$
       $= 50 + 15$
       $= 65$

   b) 4 × 25
       $= 4 × (20 + 5)$
       $= (4 × 20) + (4 × 5)$
       $= 80 + 20$
       $= 100$

6. Complete using the vertical column method.   Multiply the unit digits first.

a)   14
   × 6
   ――――
   24
   + 60
   ――――
   84
   ――――

b)   12
   × 9
   ――――
   18
   + 90
   ――――
   108
   ――――

c)   24
   × 3
   ――――
   12
   + 60
   ――――
   72
   ――――

d) 29
   × 4
   ――――
   36
   + 80
   ――――
   116
   ――――

7. Complete: *Write your answers out using either method.*

a) $36 \div 3$

$30 \div 3 = 10$
$6 \div 3 = 2$
$36 \div 3 = 12$

b) $72 \div 2$

$60 \div 2 = 30$
$12 \div 2 = 6$
$72 \div 2 = 36$

c) $45 \div 3$

$30 \div 3 = 10$
$15 \div 3 = 5$
$45 \div 3 = 15$

d) $72 \div 4$

$40 \div 4 = 10$
$32 \div 4 = 8$
$72 \div 4 = 18$

8. There are 17 books in one box.
   How many books will there be in 8 of these boxes? $17 \times 8 = 136$ books.

9. One bag of tomatoes cost R26.
   The cost of 3 bags of tomatoes = $3 \times R26 = R78.$

10. Margie has a 20m long cord.
    How many 3m pieces of cord will she be able to cut from it?

    $20 \div 3 = 6 \text{ r } 2$ 6 pieces 2 (m left)

11. Share 15 apples equally between two people.
    Each person gets $15 \div 2 = 7\frac{1}{2}$ apples.
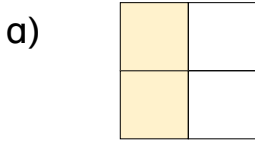
12. Three bags of sugar cost R84.
    What is the cost of 1 bag of sugar? $R84 \div 3 = R28$

Section C | Fractions and Money
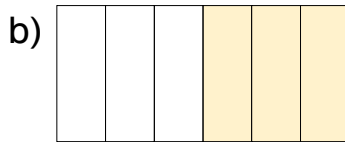
1. Explain why 3 quarters is bigger than 1 quarter.

   3 quarters means **3** of 4 equal parts, 1 quarter is only **1** of 4 equal parts.

2. Write down what fraction of each whole figure is shaded.
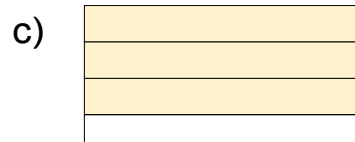
   a)

   2 quarters ($\frac{2}{4}$)
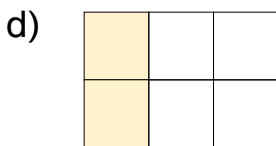
   or 1 half ($\frac{1}{2}$)

   b)

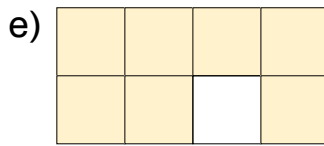   3 sixths ($\frac{3}{6}$)

   or 1 half ($\frac{1}{2}$)

   c)

   3 quarters ($\frac{3}{4}$)
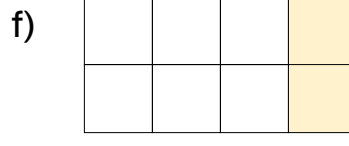
   d)

   2 sixths ($\frac{2}{6}$)

   or 1 third ($\frac{1}{3}$)

   e)

   7 eighths ($\frac{7}{8}$)

   f)

   2 eighths ($\frac{2}{8}$)

   or 1 quarter ($\frac{1}{4}$)

3. Complete:

   a) $\frac{1}{3}$ of 12

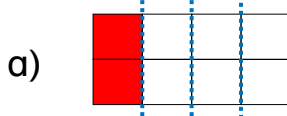 $= 12 \div 3 = 4$

   b) $\frac{1}{4}$ of 8

   $= 8 \div 4 = 2$

   c) $\frac{1}{6}$ of 24

   $= 24 \div 6 = 4$

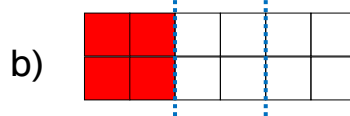   d) $\frac{1}{8}$ of 80

   $= 80 \div 8 = 10$

4. Shade the given fractional part of each rectangle:
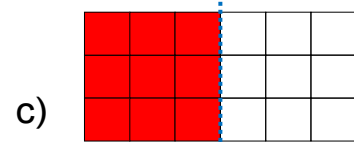
   a)

   1 quarter
   $8 \div 4 = 2$
   Shade any 2 of the 8 parts.

   b)

   1 third
   $12 \div 3 = 4$
   Shade any 4 of the 12 parts.

   c)

   1 half
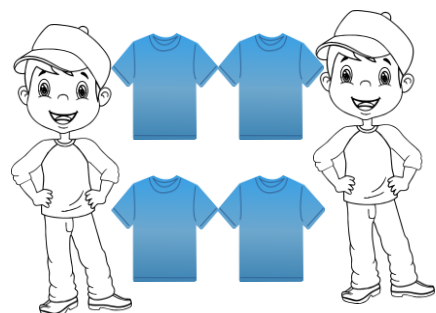 $18 \div 2 = 9$
   Shade any 9 of the 18 parts.

5. David uses 1 fifth of a 20kg bag of flour.

   How much flour did he use? $20kg \div 5 = 4kg$

6. Share four t-shirts equally between 2 boys.
   What fraction of the t-shirts does each boy get?

   2 quarters ($\frac{2}{4}$) or 1 half ($\frac{1}{2}$)

7. Fill in **>,<** or **=** between each pair of fractions to make correct statements.

a) 1 half **>** 1 quarter   b) 2 quarters **=** 1 half   c) 3 eighths **<** 1 half / 4 eighths

8. There are 2 cows, 5 goats and 1 horse in a field. **= 8 animals**

What fraction of the animals are:

a) cows? **2 eighths ($\frac{2}{8}$)** or **1 quarter $\frac{1}{4}$**

b) goats? **5 eighths ($\frac{5}{8}$)**

c) horses? **1 eighth ($\frac{1}{8}$)**

9. Six cupcakes are shared equally between 3 girls.

Each girl gets **2 sixths ($\frac{2}{6}$)** or **1 third ($\frac{1}{3}$)** of the cupcakes, in fraction form.

Sharing between 3, think thirds.

10. John spent R7,50 at the tuckshop. He paid with a R5 and two R2 coins.
How much change did he receive? **R9 − R7,50 = R1,50**

12. Mother bought 6 small bread rolls for 50c each.
How much did she spend? **6 × 50c = R3,00**

13. The price for a pack of three pencils is R12,60.
What is the price of one pencil? **R12,60 ÷ 3 = R4,20**

14. If two sweets cost R5, calculate the price of:

a) 1 sweet. **R5 ÷ 2 = R2,50**   b) 3 sweets. **R2,50 × 3 = R7,50 [R6 + R1,50]**

15. How many of each of the following coins have the same value as R4?

a)   b)   *c)   *d)

4   **8** (two 50c = R1)   **20** (five 20c = R1)   **40** (ten 10c = R1)

16. What fraction is R2 of R6? **$\frac{R2}{R6} = \frac{1}{3}$ [No units in answer]**

Section D | Patterns and Functions

1. Write down the next 3 numbers in each. Fill in the rule that you used.

   a) 5 ; 8 ; 11 ; 14 ; 17 ; 20.   Rule: +3

   b) 50 ; 46 ; 42 ; 38 ; 34 ; 30.   Rule: −4

   c) 20 ; 18 ; 16 ; 14 ; 12 ; 10.   Rule: −2

   d) 75 ; 78 ; 81 ; 84 ; 87 ; 90.   Rule: +3

2. Write down the next 5 numbers in each.

   a) 180 ; 185 ; 190 ; 195 ; 200 ; 205 ; 210 ; 215.   Rule: +5
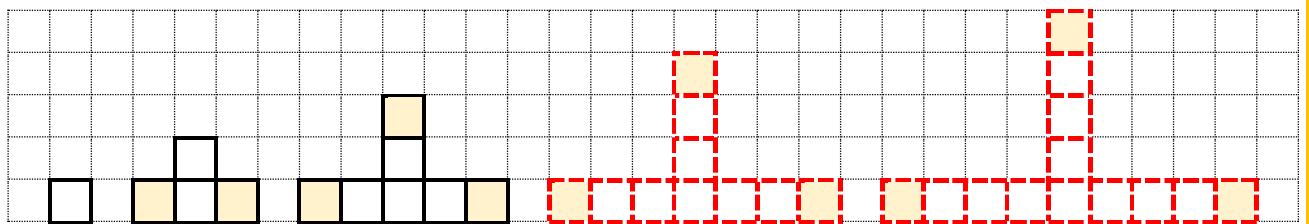
   b) 220 ; 218 ; 216 ; 214 ; 212 ; 210 ; 208 ; 206.   Rule: −2

   c) 120 ; 140 ; 160 ; 180 ; 200 ; 220 ; 240 ; 260.   Rule: +20 or +2 tens

   d) 800 ; 750 ; 700 ; 650 ; 600 ; 550 ; 500 ; 450.   Rule: −50 or −5 tens

   e) 836 ; 736 ; 636 ; 536 ; 436 ; 336 ; 236 ; 136.   Rule: −100 or −1H

3. Draw the next two diagrams:

4. Describe the pattern in words and then draw it one more time.

   The pattern is a triangle, two circles and then a square.