

# Grade 5 | Mental Maths | Term 3

## Answers

### Question 1

- a) 1 whole = 6 sixths ✓  
 b) 2 wholes = 8 quarters ✓  
 c) 2 eighths + 3 eighths = 5 eighths ✓  
 d) 1 third of 12 = 4 ✓  
 e) 1 half of 30 = 15 ✓  
 f) 1 third = 2 sixths ✓  
 g) 3 quarters = 6 eighths ✓  
 h) 1 and a half = 3 halves ✓

Total 8 / 8

### Question 2

- a)  $\frac{4}{9} + \frac{2}{9} = \frac{6}{9} = \frac{2}{3}$  in simplest form ✓  
 b)  $\frac{2}{3} - \frac{1}{3} = \frac{1}{3}$  ✓  
 c)  $1 - \frac{5}{12} = \frac{7}{12}$  ✓  
 d)  $\frac{2}{5} + \frac{2}{5} + \frac{2}{5} = \frac{6}{5} = 1\frac{1}{5}$  ✓  
 e)  $4 - 1\frac{1}{2} = 2\frac{1}{2}$  ✓  
 f)  $1\frac{5}{7} + 1\frac{4}{7} = 2\frac{9}{7} = 3\frac{2}{7}$  ✓  
 g)  $5\frac{2}{3} - 3\frac{1}{3} = 2\frac{1}{3}$  ✓  
 h)  $3\frac{1}{4} - 1\frac{3}{4} = 2\frac{5}{4} - 1\frac{3}{4} = 1\frac{2}{4} = 1\frac{1}{2}$  ✓

Total 8 / 8

### Question 3

Write equivalent fractions.

- a)  $\frac{1}{2} = \frac{3}{6} = \frac{5}{10}$  ✓  
 b)  $\frac{6}{8} = \frac{3}{4}$  ✓  
 c)  $\frac{1}{3} = \frac{4}{12}$  ✓  
 d)  $\frac{1}{4} = \frac{2}{8} = \frac{3}{12}$  ✓  
 e)  $\frac{3}{4} = \frac{9}{12}$  ✓  
 f)  $\frac{8}{20} = \frac{2}{5}$  ✓  
 g)  $\frac{2}{3} = \frac{20}{30}$  ✓

Total 7 / 7

### Question 4

Write as mixed numbers.

- a)  $\frac{4}{3} = 1\frac{1}{3}$  ✓  
 b)  $\frac{21}{2} = 10\frac{1}{2}$  ✓  
 c)  $\frac{18}{4} = 4\frac{2}{4} = 4\frac{1}{2}$  in simplest form ✓

Write as improper fractions.

- d)  $1\frac{1}{4} = \frac{5}{4}$  ✓  
 e)  $2\frac{2}{3} = \frac{8}{3}$  ✓  
 f)  $10\frac{3}{4} = \frac{43}{4}$  ✓

Total 6 / 6

### Question 5

Write in the simplest form.

a)  $\frac{2}{8} = \frac{1}{4}$  ✓

b)  $\frac{12}{20} = \frac{3}{5}$  ✓

c)  $\frac{9}{6} = \frac{3}{2}$  or  $1\frac{1}{2}$  ✓

d)  $\frac{15}{30} = \frac{1}{2}$  ✓

**Complete:** 12 cakes are shared equally amongst 3 people.  
What fraction of the cakes does each person get? 4 cakes each.

Answer:  $\frac{4}{12} = \frac{1}{3}$  of the cakes.

Total 5 / 5

### Question 6

Complete:

a) Ma orders 5 pizzas so that each girl gets one quarter of a pizza.

How many girls are there?

$5 \times 4$  quarter pizzas  
= 20 quarter pizzas thus **20 girls.**

b) JP has R20.

He spends R8 on chips and R4 on sweets. **R12 spent**

What fraction of his money does he have left?  $R20 - R12 = R8$  left

$\frac{8}{20} = \frac{4}{10} = \frac{2}{5}$  of his money is left.

Total 2 / 2

### Question 7

a) 2 kg = **2 000** g ✓

b)  $\frac{1}{4}$  kg = **250** g ✓

c) 8 kg 3g = **8 003** g ✓

d) 3,5 kg = **3 500** g ✓

e) 2 kg - 400 g = **1 600** g ✓

f)  $\frac{3}{4}$  kg + 150 g =  $750 + 150 =$  **900**g ✓

g) 12 kg 50 g = **12 050** g

h) 7 kg - 4,5 kg = **2 kg 500** g ✓

Total 8 / 8

### Question 8

a) 1kg 200g  $\times 4 =$  **4 kg 800** g ✓

b)  $\frac{1}{2}$  kg  $\times 3 =$  **500g  $\times 3 =$  1500** g ✓

c) 2kg 400g  $\times 3 =$  **6 kg 1200** g  
= **7 kg 200** g ✓

d)  $\frac{1}{4}$  kg  $\div 2 =$  **250  $\div 3 =$  125** g ✓

e) 1kg 200g  $\div 3 =$  **1200 g  $\div 3 =$  400** g ✓

f)  $\frac{1}{4}$  kg  $\times 4 =$  1kg ✓ [ $250g \times 4 = 1000g$ ]

g) 4 kg - **500** g = **3,5** kg ✓

h) **900** g +  $\frac{1}{2}$  kg = **1kg 400** g ✓

Total 8 / 8

### Question 9

What fraction is:

[Answer in simplest form. No units in the answer]

- a) 2kg of 10kg?  $\frac{2 \text{ kg}}{10 \text{ kg}} = \frac{1}{5}$
- b) 40g of 100g?  $\frac{40 \text{ g}}{100 \text{ g}} = \frac{4}{10} = \frac{2}{5}$  ✓
- c) 10kg of 25kg?  $\frac{10 \text{ kg}}{25 \text{ kg}} = \frac{2}{5}$  ✓
- d) 250g of 1kg?  $\frac{250 \text{ g}}{1000 \text{ g}} = \frac{1}{4}$  ✓

Complete:

Alex bought 4kg of sugar for R60.

What will 3kg of this sugar cost?

Price per kg:  $R60 \div 4\text{kg} = R15/\text{kg}$

Price for 3kg:  $R15/\text{kg} \times 3 = R45$

Total 5 / 5

### Question 10

- a)  $70\ 000 + 50 = 70\ 050$  ✓
- b)  $120 \text{ tens} + 18 \text{ units} = 1\ 218$  ✓  
 $1\ 200 + 18$
- c)  $400 + 400\ 000 + 600 = 401\ 000$  ✓
- d)  $100\ 000 + 3\ 500 = 103\ 500$  ✓
- e)  $100 \text{ hundreds} + 15 \text{ tens}$   
 $= 10\ 000 + 150 = 10\ 150$  ✓
- f)  $(3 \times 100) + (8 \times 100) = 1\ 100$  ✓
- g)  $(9 \times 10\ 000) + (2 \times 10) = 90\ 020$  ✓
- h)  $(18 \times 1\ 000) + (3 \times 100) = 18\ 300$  ✓

Total 8 / 8

### Question 11

Insert the symbol  $>$ ,  $<$  or  $=$ .

- a)  $66\ 689 < 66\ 698$  ✓
- b)  $2^{300} = 23 \text{ hundreds} = 23 \times 10 \times 10$  ✓
- c)  $72\ 046 \times 1 < 72\ 046 + 1 = 72\ 047$  ✓
- d)  $20\ 000 + 600 < 60\ 000 + 20$  ✓
- e)  $7\ 030 < (7 \times 1000) + (3 \times 100)$  ✓
- f)  $\frac{1}{3}$  of 30 000  $= \frac{1}{4}$  of 40 000  $= 10\ 000$  ✓
- g)  $\frac{2}{3}$  of 96  $= 64 < \frac{3}{4}$  of 96  $= 72$  ✓

Total 7 / 7

### Question 12

Round off to the nearest 10:

- a)  $163 \approx 160$  ✓
- b)  $3\ 497 \approx 3\ 500$  ✓ [Not 3 490]
- c)  $838\ 276 \approx 838\ 280$  ✓

Round off to the nearest 100:

- a)  $587 \approx 600$  ✓
- b)  $18\ 329 \approx 18\ 300$  ✓
- c)  $564\ 671 \approx 564\ 700$  ✓

Total 6 / 6

### Question 13

Round off to the nearest 1000:

- a)  $9\ 825 \approx 10\ 000$  ✓  
 b)  $85\ 269 \approx 85\ 000$  ✓  
 c)  $238\ 940 \approx 239\ 000$  ✓

Complete:

- a) Fourteen thousand, one hundred and nine is written **14 109**.  
 b) Eight hundred and ninety-five thousand and two is written **895 002**.

Total **5 / 5**

### Question 14

- a)  $2\ 500 + 40 = 2\ 540$  ✓  
 b)  $2\ 500 + 250 = 2\ 750$  ✓  
 c)  $2\ 500 + 1\ 500 = 4\ 000$  ✓  
 d)  $2\ 500 + 10\ 500 = 13\ 000$  ✓  
 e)  $25\ 000 + 250 = 25\ 250$  ✓  
 f)  $25\ 000 + 7\ 000 = 32\ 000$  ✓  
 g)  $25\ 000 + 25\ 000 = 50\ 000$  ✓  
 h)  $25\ 000 + 207\ 000 = 232\ 000$  ✓

Total **8 / 8**

### Question 15

- a)  $25 - 8 - 3 = 14$  ✓  
 b)  $100 - 15 - 25 = 60$  ✓  
 c)  $250 - 70 - 5 = 175$  ✓  
 d)  $800 - 150 - 150 = 500$  ✓  
 e)  $1\ 000 - 120 - 25 = 855$  ✓  
 f)  $15\ 000 - 6\ 000 - 200 = 8\ 800$  ✓  
 g)  $30\ 000 - 3\ 000 - 300 = 26\ 700$  ✓  
 h)  $42\ 500 - 3\ 500 - 250 = 38\ 750$  ✓

Total **8 / 8**

### Question 16

- a)  $25 + \underline{9} = 34$  ✓  
 b)  $230 + \underline{70} = 300$  ✓  
 c)  $145 + \underline{78} = 223$  ✓ [223 - 145 = 78]  
 d)  $\underline{600} + 900 = 1\ 500$  ✓  
 e)  $\underline{3\ 500} + 2\ 500 = 6\ 000$  ✓  
 f)  $15\ 000 + \underline{4\ 750} = 19\ 750$  ✓  
 g)  $\underline{50\ 000} + 80\ 000 = 130\ 000$  ✓  
 h)  $32\ 550 + \underline{450} = 33\ 000$  ✓

Total **8 / 8**

## Question 17

- a)  $92 - \underline{38} = 54$  ✓ [92 - 54 = 38]
- b)  $120 - \underline{50} = 70$  ✓
- c)  $\underline{2\ 000} - 40 = 1\ 960$  ✓
- d)  $3\ 500 - \underline{1\ 500} = 2\ 000$  ✓
- e)  $\underline{12\ 000} - 7\ 000 = 5\ 000$  ✓
- f)  $\underline{13\ 400} - 4\ 400 = 9\ 000$  ✓
- g)  $10\ 000 - \underline{3\ 500} = 6\ 500$  ✓
- h)  $85\ 450 - \underline{20\ 000} = 65\ 450$  ✓

Total 8 / 8

## Question 18

- a)  $8 + \underline{7} + 2 + 10 = 27$  ✓
- b)  $120 + \underline{180} + 160 = 460$  ✓
- c)  $400 + 500 + \underline{600} = 1\ 500$  ✓
- d)  $1\ 500 + 150 + \underline{15} = 1\ 665$  ✓
- e)  $\underline{250} + 350 + 450 = 1\ 050$  ✓
- f)  $3\ 000 + \underline{700} + 500 = 4\ 200$  ✓
- g)  $2\ 000 + 7\ 000 + \underline{8\ 500} = 17\ 500$  ✓
- h)  $85 + 78 + \underline{75} + 27 = 265$  ✓

Total 8 / 8

## Question 19

- a)  $34 - 12 - 7 = \underline{15}$  ✓
- b)  $150 - 25 - 35 = \underline{90}$  ✓
- c)  $1\ 300 - 70 - 80 = \underline{1\ 150}$  ✓
- d)  $1\ 300 - 200 - 300 = \underline{800}$  ✓
- e)  $10\ 000 - 1\ 500 - 2\ 500 = \underline{6\ 000}$  ✓
- f)  $12\ 500 - 700 - 3\ 000 = \underline{8\ 800}$  ✓
- g)  $12\ 500 - 7\ 000 - 300 = \underline{5\ 200}$  ✓
- h)  $12\ 500 - 7\ 000 - 3\ 000 = \underline{2\ 500}$  ✓

Total 8 / 8

## Question 20

- a) The temperature is  $18^{\circ}\text{C}$ .  
It rises by  $7^{\circ}\text{C}$ .  
New temperature =  $\underline{25^{\circ}\text{C}}$  ✓
- b) The temperature is  $10^{\circ}\text{C}$ .  
It drops by  $12^{\circ}\text{C}$ .  
New temperature =  $\underline{-2^{\circ}\text{C}}$  ✓
- c) The temperature is  $-5^{\circ}\text{C}$ .  
It rises by  $10^{\circ}\text{C}$ .  
New temperature =  $\underline{5^{\circ}\text{C}}$  ✓
- \*d) The temperature is  $12^{\circ}\text{C}$ .  
It drops by  $20^{\circ}\text{C}$ .  
New temperature =  $\underline{-8^{\circ}\text{C}}$

Total 4 / 4

### Question 21

Complete each number pattern.

a) 14 ; 20 ; 26 ; 32 ; 38 . [+6]

b) 64 ; 32 ; 16 ; 8 ; 4 . [ $\div 2$ ]

c) 1 ; 4 ; 9 ; 16 ; 25 ; 36 .  
 $1 \times 1, 2 \times 2, 3 \times 3, 4 \times 4, 5 \times 5, 6 \times 6.$

d) 9 ; 18 ; 36 ; 72 ; 144 . [ $\times 2$ ]

e) 2 ; 6 ; 12 ; 20 ; 30 ; 42 .  
 $+4 \quad +6 \quad +8 \quad +10 \quad +12$

f) 100 ; 92 ; 84 ; 76 ; 68 . [-8]

g) 20 ; 19 ; 17 ; 14 ; 10 ; 5 .  
 $-1 \quad -2 \quad -3 \quad -4 \quad -5$

Total 7 / 7

### Question 22

a)  $7 \times (3 + 4) = \underline{7 \times 7 = 49}$

b)  $(7 - 3) \times 4 = \underline{4 \times 4 = 16}$

c)  $(12 + 18) \div 3 = \underline{30 \div 3 = 10}$

d)  $12 + (18 \div 3) = \underline{12 + 6 = 18}$

e)  $(40 - 12) \div 4 = \underline{28 \div 4 = 7}$

f)  $40 - (12 \div 4) = \underline{40 - 3 = 37}$

g)  $(8 + 4) \times (20 \div 4) = \underline{12 \times 5 = 60}$

h)  $(8 \times 4) \div (20 - 4) = \underline{32 \div 16 = 2}$

Total 8 / 8

### Question 23

True or False?

If False, give the correct answer

a)  $1\ 000 - 450 = 650$  False. 550 ✓

b)  $2\ 530 \times 10 = 2\ 540$  False. 25 300 ✓

c)  $20 - 8 - 4 = 20 - 4 - 8$  True. 8. ✓

d)  $100 \div (4 \times 5) = 5$  True. ✓  
 $[100 \div 20 = 5]$

e)  $(2 \times 8) + 4 = (2 + 8) \times 3$  False ✓  
 $= 20 \quad = 30$

f)  $1\ 500 - 150 = 1\ 250$  False. 1350 ✓

g)  $12\ 000 = 12 \times 10 \times 100$  True ✓

Total 7 / 7

### Question 24

a)  $10 \times 10 = \underline{100}$

b)  $12 \times 12 = \underline{144}$

c)  $8 \times 30 = \underline{240}$

d)  $50 \times 10 \times 10 = \underline{5\ 000}$

e)  $12 \times 2 \times 3 = \underline{12 \times 6 = 72}$

f)  $40 \times 50 = \underline{2\ 000}$

g)  $300 \times 12 = \underline{3\ 600}$

h)  $800 \times 60 = \underline{48\ 000}$

Total 8 / 8

### Question 25

Write down all the factors of:

- a) 12. **1, 2, 3, 4, 6, 12** ✓  
 b) 25. **1, 5, 25** ✓  
 c) 42. **1, 2, 3, 6, 7, 14, 21, 42** ✓

Write down the first 5 multiples of:

- a) 4. **4, 8, 12, 16, 20.** ✓  
 b) 9. **9, 18, 27, 36, 45.** ✓  
 c) 12. **12, 24, 36, 48, 60.** ✓

Total **6 / 6**

### Question 26

- a) **7 × 6 = 42** ✓  
 b) 13 × **3** = 39 ✓  
 c) **10** × 13 = 130 ✓  
 d) **11** × 12 = 132 ✓  
 e) 18 × 0 × 5 = **0** ✓  
 f) 30 × **40** = 120 ✓  
 g) 150 × 20 = **3000** ✓  
 h) **50** × 900 = 45 000 ✓

Total **8 / 8**

### Question 27

- a) 1 500 + 51 000 = **52 500** ✓  
 b) 10 000 - 9 950 = **50** ✓  
 c) 38 × 22 = **836** ✓  
 d) 50 ÷ 4 = **12 rem 2** ✓  
 e) 45 500 + 32 600 = **78 100** ✓  
 f) 52 800 - 12 800 = **40 000** ✓  
 g) 900 × 25 = **22 500** ✓  
 h) 420 ÷ 7 = **60** ✓

Total **8 / 8**

### Question 28

- a) 120 + 1 200 + 12 000 = **13 320** ✓  
 b) 80 000 - 8 000 - 80 = **71 920** ✓  
 c) 15 × 20 × 5 = **1 500** ✓  
 d) 100 ÷ (20 ÷ 5) = **100 ÷ 4 = 25** ✓  
 e) 4 585 + **2 580** = 7 165 ✓  
 f) 5 000 - 1 250 = **3 750** ✓  
 g) 9 500 × **2** = 19 000 ✓  
 h) 5 500 ÷ 2 = **2 750** ✓

Total **8 / 8**

## Question 29

- a)  $2\ 800 + 82\ 000 = 84\ 800$  ✓
- b)  $10\ 000 - 8\ 888 = 1\ 112$  ✓
- c)  $45 \times 22 = 990$  ✓
- d)  $84 \div 4 = 21$  ✓
- e)  $98\ 200 + 1\ 550 = 99\ 750$  ✓
- f)  $26\ 800 - 3\ 850 = 22\ 950$  ✓
- g)  $45 \times 9 = 405$  ✓
- h)  $420 \div 420 = 1$  ✓

Total 8 / 8

## Question 30

- a)  $0 \times 6 = 0$  ✓
- b)  $13 \times 15 = 195$  ✓
- c)  $100 \times 19 = 1\ 900$  ✓
- d)  $13 \times 12 = 156$  ✓
- e)  $100 \times 0 \times 10 = 0$  ✓
- f)  $3\ 000 - 2\ 555 = 445$  ✓
- g)  $160 \div 40 = 4$  ✓
- h)  $86 \div 7 = 12\ r\ 2$  ✓

Total 8 / 8

## Question 31

- a)  $14\ \text{kg} + 15\ 350\ \text{g}$   
 $= 29\ \text{kg}\ 350\ \text{g}$  ✓
- b)  $10\ 000 - 8\ 777 = 1\ 223$  ✓
- c)  $48 \times 12 = 576$  ✓
- d)  $8\ 000\ \text{g}$  of  $16\ \text{kg}$   
 $= 8\ \text{kg}$  of  $16\ \text{kg} = 1\ \text{half}$  ✓
- e)  $900 \div 7 = 128\ r\ 4$  ✓
- f)  $90\ 360 - 370 = 89\ 990$  ✓
- g)  $400 \times 25 = 10\ 000$  ✓
- h)  $420\ \text{kg} \div 7 = 60\ \text{kg}$  ✓

Total 8 / 8

## Question 32

- a)  $15 + 150 + 1\ 500 + 15\ 000$   
 $= 16\ 665$  ✓
- b)  $70\ 000 - 7\ 000 - 700 = 62\ 300$  ✓
- c)  $100 \times 16 \times 10 = 16\ 000$  ✓
- d)  $400 \div (80 \div 10)$   
 $= 400 \div 8 = 50$  ✓
- e)  $4\ 585 - (9\ 000 - 4\ 500)$   
 $= 4\ 585 - 4\ 500 = 85$  ✓
- f)  $5\ 000 \div 1 = 5\ 000$  ✓
- g)  $6\ 500 \times 2 = 13\ 000$  ✓
- h)  $6550 \div 2 = 3\ 275$  ✓

Total 8 / 8