



Province of the  
**EASTERN CAPE**  
EDUCATION

## INTERMEDIATE PHASE

**GRADE 6**

**JUNE 2011**

**MATHEMATICS**

LEARNER'S NAME: \_\_\_\_\_

SCHOOL: \_\_\_\_\_

DISTRICT: \_\_\_\_\_

MARKS: 50

TIME: 1 hour (allow up to 10 minutes extra time)

\_\_\_\_\_  
This question paper consists of 8 pages.  
\_\_\_\_\_

**INSTRUCTIONS AND INFORMATION**

1. Answer all questions.
2. Write neatly and clearly.
3. Do not change numbering.
4. Show all your working details where necessary.
5. Do not use a calculator.

## QUESTIONS

1. Find the value of  $x$  if  $x - 25 = 57$ .

\_\_\_\_\_ (1)

2. Fill in the missing number:

50,2 ; 49,8 ; 49,4 ; 49,0 ; \_\_\_\_ ; 48,2

\_\_\_\_\_ (1)

3. Write this number in digits:

Four million two hundred and eighty three thousand one hundred and seventy six

\_\_\_\_\_ (1)

4. Write the number 278 245 in expanded notation.

\_\_\_\_\_ (1)

5. Complete the equivalent fraction:  $\frac{5}{8} = \frac{15}{?}$

\_\_\_\_\_ (1)

6. Round off 286 173 to the nearest:

6.1 5

\_\_\_\_\_ (1)

6.2 1000

\_\_\_\_\_ (1)

7. Write down the value of underlined digit:

7.1 5 701 896

\_\_\_\_\_ (1)

7.2 5 741 896

\_\_\_\_\_ (1)

8. Simplify the following:

8.1  $945\,671 + 26\,893$

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ (2)

8.2 
$$\begin{array}{r} 567\,432 \\ - 95\,238 \\ \hline \end{array}$$

\_\_\_\_\_

(1)

9. Mrs Mabena bakes 240 small cakes daily and packs them into plastic bags to sell in her spaza shop. Each plastic bag contains 6 small cakes.

9.1 How many plastic bags does she need to pack all the cakes?

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(1)

- 9.2 If she used R60 to make the small cakes and a packet of 6 cakes is sold for R3,00, calculate the profit/gain she makes if she sells all the cakes.

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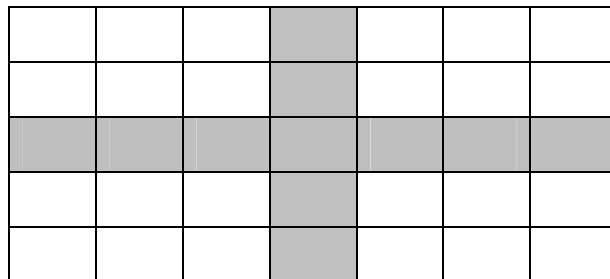


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(2)

10. From the figure below, what **fraction** is the shaded part? \_\_\_\_\_

(1)



11. Amanda's father flies to Dallas, USA and the time there is 7 hours behind South African time. If the flight leaves South Africa at 06:45 on Monday, what time and day is it in Dallas?

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(2)

12. Twelve (12) books cost R720,00. What will 7 books cost?

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(2)

13. Simplify the following fraction:  $5\frac{1}{4} + 3\frac{1}{2} - \frac{2}{8}$

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(2)

14. Vikesh has 20 sweets. If he eats  $\frac{1}{5}$  of them, how many sweets are left?

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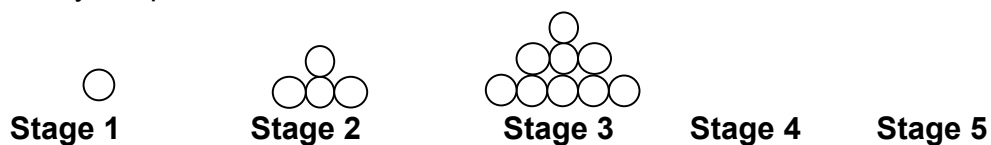
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(2)

15. Study the pattern below:



Stage	1	2	3	4	5	
Number of circles	1	4	9			

- 15.1 Draw the Stage 5 pattern.

\_\_\_\_\_ (1)

- 15.2 How many circles are used for stage 4?

\_\_\_\_\_  
\_\_\_\_\_ (1)

- 15.3 Write in your own words the rule for the pattern.

\_\_\_\_\_  
\_\_\_\_\_ (2)

- 15.4 At what stage will the pattern consist of 144 circles?

\_\_\_\_\_  
\_\_\_\_\_ (2)

16. Litha is carrying a 5ℓ bucket of water.

- 16.1 How many of these buckets can fill up a 200ℓ container?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (1)

- 16.2 How many millilitres can fill up the 5ℓ bucket?

\_\_\_\_\_  
\_\_\_\_\_ (1)

17. The school bus travels a distance of 6 km and 245 m to take learners to school. Write the distance in metres.

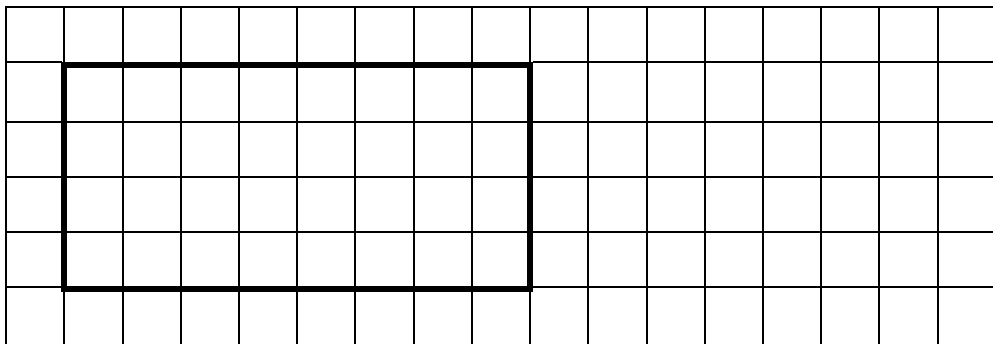
\_\_\_\_\_ (1)

18. Convert to kg: 35 467 g = \_\_\_\_\_

(1)

19. Study the diagram below:

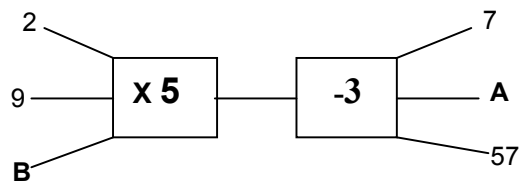
- 19.1 Redraw the rectangle on the same grid by halving its dimensions (sides).



(1)

- 19.2 How many squares are in the reduced rectangle? \_\_\_\_\_ (1)

- 20.



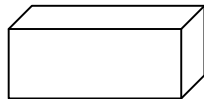
- 20.1 The value of A is \_\_\_\_\_ (1)

- 20.2 The value of B is \_\_\_\_\_ (1)

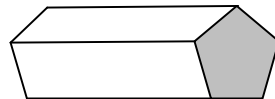
21. Study the following solid shapes:



A



B



C



D

- 21.1 Name shape C. \_\_\_\_\_ (1)

- 21.2 How many faces does shape B have? \_\_\_\_\_ (1)

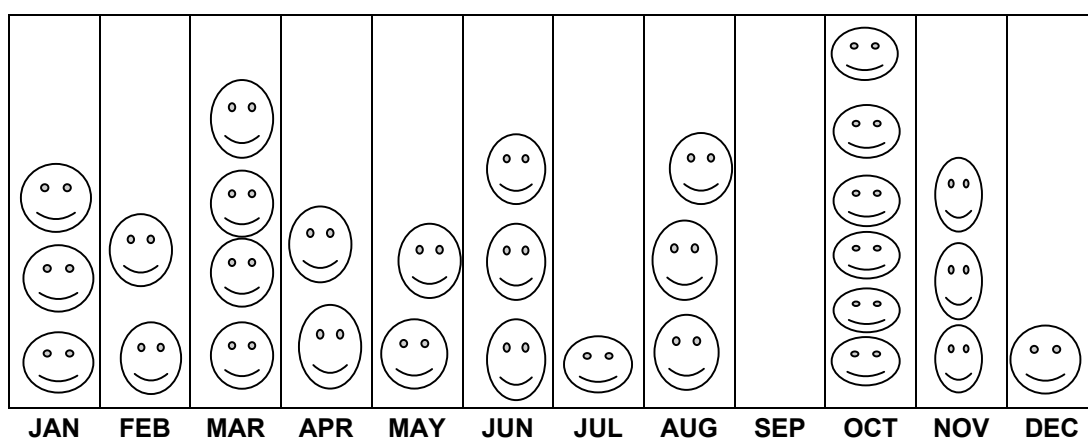
21.3 How many vertices does shape D have? \_\_\_\_\_ (1)

21.4 Sort all the shapes above according to pyramids and prisms (use the given letters for shapes).

Pyramids: \_\_\_\_\_ (1)

Prisms: \_\_\_\_\_ (1)

22. The following data represents Grade 6 learners' birthdays at Freedom Primary School:



In this picture graph, 1 face represents 5 learners.

22.1 Which month has the most birthdays? \_\_\_\_\_ (1)

22.2 Which month has 20 birthdays? \_\_\_\_\_ (1)

22.3 What is the mode in this pictograph (actual number of learners)? \_\_\_\_\_ (1)

22.4 What is the total number of Grade 6 learners at this school? \_\_\_\_\_ (2)

23. Complete the table below by filling the missing spaces.

GRADE	Tallies	Frequency
6 A	<i>                             </i>	
6 B		36

(2)

**TOTAL: 50**