



Province of the
EASTERN CAPE
EDUCATION

INTERMEDIATE PHASE

GRADE 6

NOVEMBER 2011

MATHEMATICS

MARKS: 50

TIME: 2 hours

This question paper consists of 10 pages.

INSTRUCTIONS AND INFORMATION

1. Answer all questions on the question paper.
2. Do not rewrite the questions.
3. Write neatly and clearly.
4. Do not change numbers of the questions.
5. Show all your working details where necessary.
6. Do not use a calculator.

QUESTIONS

1. Write this number in words: 2 346 475

_____ (1)

2. Arrange the numbers below in descending order (from biggest to smallest).

1,5 ; 0,9 ; 0,89 ; 1,35 ; 1,53 ; 1,13

_____ (1)

3. A factory makes 10 562 pairs of shoes in a month. If they made 3 789 fewer pairs for this month than usual, how many pairs of shoes were made?

_____ (2)

4. Add the following:

2 517 829

+ 6 436 427

_____ (1)

5. Round off 527 653 to the nearest:

5.1 Ten _____ (1)

5.2 Thousand _____ (1)

6. $\frac{2}{3} = \frac{?}{15}$

The missing number is: _____ (1)

7. In which year will we be $2\frac{1}{2}$ decades away from 2011? _____ (1)
8. A 2 l juice is to be shared among 5 friends. They use a cup measuring 200 ml. How many cups will each friend get?
- _____
- _____ (2)
9. If Gert watches TV for 1 hour 30 minutes every day, how much time does he spend watching TV in a week?
- _____
- _____ (2)
10. Convert 354g into kg.
- _____
- _____ (1)
11. In a Mathematics test set out of 50, Lazola obtained 37 marks. Convert this mark to a percentage.
- _____
- _____ (1)
12. Complete the number sentence below by filling the missing number in the box:
- 3 x - 7 = 8 (1)

13. Simplify:

13.1 $6\frac{1}{4} + 4\frac{1}{2} - \frac{4}{12}$

(2)

13.2 $32 - (3 \times 6) + 48 \div 6$

(2)

14. Select all prime numbers from the list below.

1; 8; 17; 2; 35; 15; 13; 53; 48; 21 _____

(1)

15. Write 7 234 509 in expanded notation.

(1)

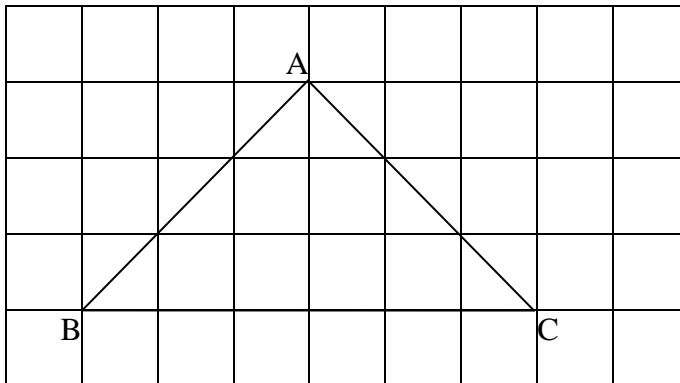
16. A crate contains 3 697 oranges. How much money will Sine make out of her crate if she sells one orange for 78 cents?

(2)

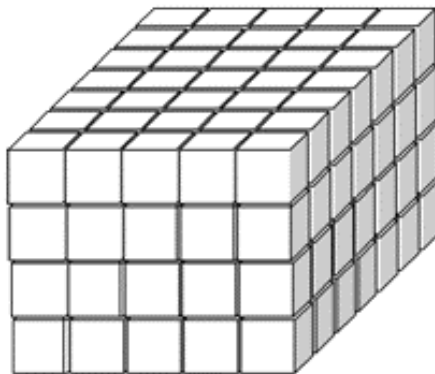
17. Convert 0,35 to a common fraction
(in its simplest form). _____ (1)

18. From the given number write the
value of the underlined digit:
4 165 256 _____ (1)

19. Calculate the total number of ...
19.1 squares (area) of Triangle ABC. _____ (1)



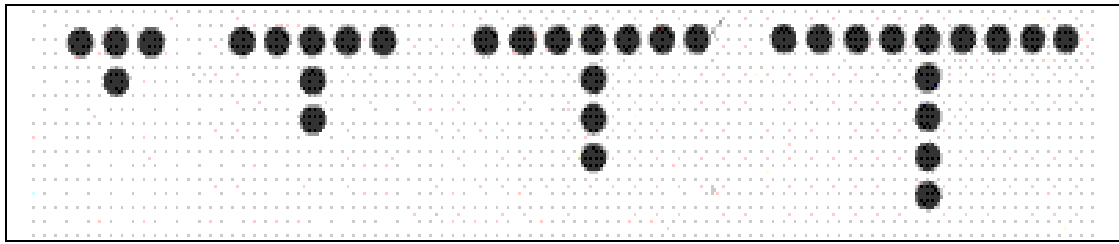
19.2 small blocks in the solid below. _____ (1)



19.3 Find the perimeter of the base of the solid (distance around the solid) if the
side of each cube is 1 cm.

_____ (1)

20. Namhla is playing with some marbles and she makes the following T-shaped patterns.



20.1 Draw the next pattern.

_____ (1)

20.2 Describe in your own words what you notice.

_____ (1)

20.3 Write the general rule for the pattern above.

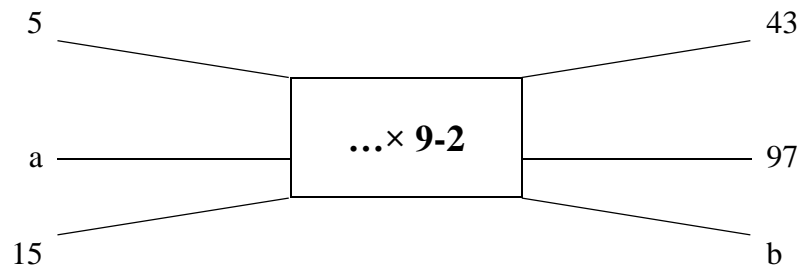
_____ (2)

20.4 How many marbles does she need to do the 25th pattern?

_____ (1)

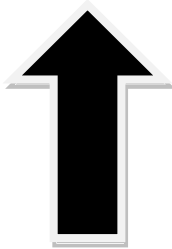
21. Complete the flow chart below by filling in the missing numbers.

(a) _____ (b) _____ (2)

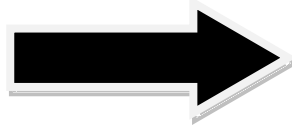


22. Draw the lines of symmetry in the letter **H** (1)

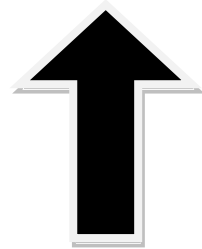
23. The figures below have undergone transformation. Study the figures carefully and answer the questions that follow:



A



B



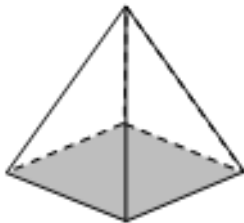
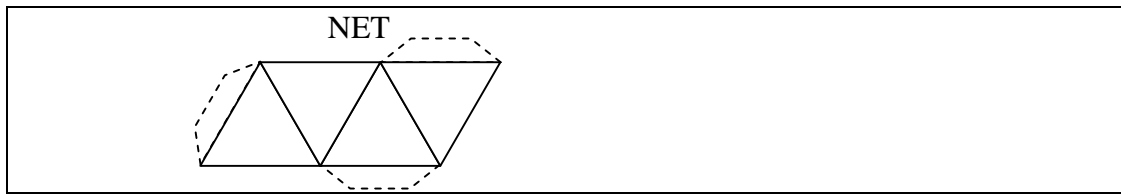
C

What type of transformation has occurred from ...

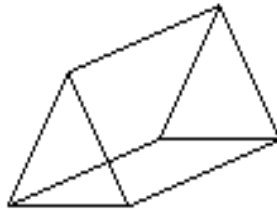
23.1 A to B? _____ (1)

23.2 A to C? _____ (1)

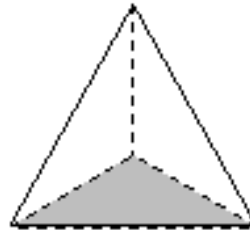
24. Given the solids shape below answer the following questions:



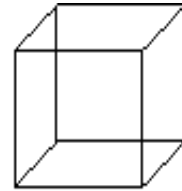
A



B



C



D

- 24.1 Choose the shape of the given NET.
(Write only the letter of the correct shape). _____ (1)
- 24.2 What is the difference between shapes A and B? _____ (1)
- 24.3 From the shapes above, give the name of the solid whose vertices are all equal to 90° . _____ (1)

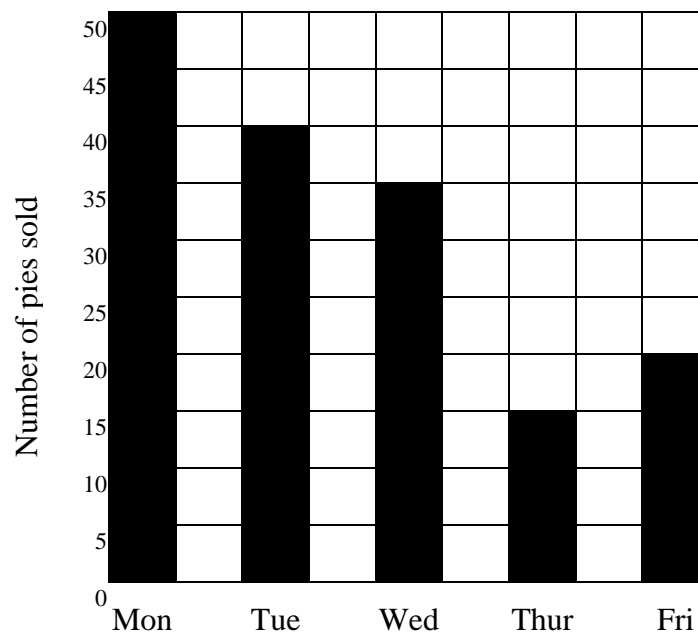
25. The following are Mental Maths scores (out of 10) for 19 Grade 6 learners:

4	8	7	7	5
3	7	6	9	7
8	5	4	6	6
6	10	5	7	

Find the ...

- 25.1 mode of the scores. _____ (1)
- 25.2 median of the scores. _____ (1)
- _____
- _____
- _____

26. Thabang buys a closed bag of sweets at the school tuck shop. The bag contains 6 chocolates, 3 toffees and mint flavoured sweets (all same size and shape). If he puts his hand in the bag and picks any sweet without looking into the bag, ...
- 26.1 What is the chance that it will be a toffee? _____ (1)
- 26.2 What is the ratio of chocolates to toffees? _____ (1)
- 26.3 Thabang is in Grade 6. What is his chance to be principal of a school in 2015?
(Certain or possible or impossible) _____ (1)
27. A tuck shop sells pies. The bar graph below shows the daily sales for a week. The vertical axis shows the number of pies sold. The horizontal axis shows the days of the week.



- 27.1 How many pies were sold for the week? _____ (1)
- 27.2 Which day did they sell the most pies? _____ (1)
- 27.3 On which day did they sell 35 pies? _____ (1)

TOTAL: 50