

END OF YEAR TEST FOR GRADE 7*

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Abstract

AN END OF YEAR TEST FOR GRADE 7 LEARNERS IN SOUTH AFRICA

NAME: _____ DIVISION: _____

1 NOVEMBER FINAL TEST 2009

2 GRADE SEVEN

2.1 EXAMINER: MRS.S.GOVENDER [CROSSMEAD PRIMARY]

2.2 MARKS: $80 \div 2 = 40$

2.3 TIME: $1 \frac{1}{2}$ HOURS

----- QUESTION ONE

- SHOW ALL WORKING.

1.1.1 $542 + 537 - 647 =$ _____

1.1.2 $9 \times 7 - 20 \div 4 =$ _____

1.1.3 $2\frac{1}{4} + 4\frac{1}{2} + 7\frac{3}{4} =$ _____

1.1.4 Write 0,5 as a proper fraction. _____

1.1.5 $6^2 + 2^3 =$ _____

1.1.6 $\sqrt{36} - \sqrt{9} =$ _____

1.1.7 20% of R400 = _____

1.1.8 Replace * with < ; > or =.

1.1.8.1 $3^\circ \text{C} * -10^\circ \text{C}$ _____

1.1.8.2 $210 * 0,2$ _____

1.2 Which time is later in the day? 11:40pm or 19:45 _____

1.3 Four students share a flat to save on rent. The rooms have different sizes and the owner charges them the following rates per week:

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Name of student	Amount
Preiti	R270
Ashwairaya	R180
Kareena	R200
Sushmita	R250

Table 1

- 1.3.1 What is the total they are paying per week? -----
 1.3.2 What is the monthly amount that Sushmita pays for a 4 week month? -----
 1.3.3 What percentage of the weekly rent does Preiti pay of the total amount per week? -----

 1.3.4 The bond payment of the owner for the house he is renting out to the four students is R3400 per month. How much profit, if any, does he make? -----
 [_____/15]

QUESTION 2

2.1 Simplify this ratio: 9 : 36 _____ :

2.2 Patience is raising funds for their class fundraising project at her school. She plans on selling lemonade. One litre of concentrated lemonade has to be mixed with 4 litres of water. The ratio of concentrated lemonade to water is thus 1:4. The following table represents the volume of concentrated lemonade and the volume of water in litres.

Volume of concentrated lemonade [litres]	1	5	6	
Volume of water [litres]	4		24	28

Table 2

- 2.2.1 Complete the above table by filling in the missing values.
 2.2.2 If she used 10 litres of concentrated lemonade, how much of diluted lemonade juice did she get?

 2.3 Mr.Naidoo and his family drove from Durban to Sun City for the December holidays last year. The single journey was 900km long. They departed at 06:00 and arrived at 16:45 on the same day.

2.3.1 How long did it take the Naidoos to drive to Sun City? -----

2.3.2 The family rested for 1 hour in Johannesburg after covering half the distance. They also used 45 minutes for re-fuelling and short breaks.

2.3.2.1 How much time did they actually spend driving?

 2.3.2.2 What is the family's actual average speed? [Use : Speed = distance ÷ time]

 2.3.3 Mr.Naidoo's car uses about 10 litres of petrol for every 100km travelled. How many litres of petrol did

Mr.Naidoo use to drive to Sun City? -----

[_____/10]

QUESTION 3

3.1 The following data represents the marks scored out of 50 by eleven grade 7 learners in our class for a recent

Maths.test:

41 33 42 39 42 44 42 40 46 21 28

3.1.1 Write down the mode. _____

3.1.2 Write the above scores in ascending order and then write down the median.

median: _____

3.1.3 Find the total for all 11 learners and then calculate the mean[average].

Total: _____

Mean = Total ÷ number of scores = _____

3.1.4 Calculate the range of the scores. Highest score – lowest score = _____

[_____/5]

3.2 The grade 7B learners did a survey amongst the community of Crossmoor on the type of cars people are driving.

These were the results:

BMW	TOYOTA	TOYOTA	TOYOTA	FORD	TOYOTA	NISSAN
FORD	FORD	MERCEDES	VW	BMW	FORD	VW
TOYOTA	TOYOTA	NISSAN	VW	NISSAN	BMW	NISSAN
MERCEDES	FORD	VW	TOYOTA	VW	TOYOTA	VW

Table 3

3.2.1 Complete the following tally table.

Type of car	Tally	Frequency
BMW		
Ford		
Mercedes		
Nissan		
Toyota		
VW		
TOTAL		

Table 4

3.2.2 Draw a bar graph of the results of the survey obtained in the tally table.

[_____/15]

QUESTION 4

4.1 The numbers 1 to 15 are placed in a hat. What is the probability to draw each of the following?

4.1.1 an even number _____

4.1.2 a multiple of 5 _____

4.1.3 a prime number _____

4.1.4 a number less than nine _____

- 4.1.5 an even number or a multiple of 5 _____
- 4.1.6 a number bigger than 15 _____
- 4.2 I have a pack of 52 playing cards. What is the probability to draw each of the following?
- 4.2.1 a spade card _____
- 4.2.2 a red card _____
- 4.2.3 a king card _____
- 4.2.4 a 7 of hearts card _____ [_____/5]

QUESTION 5

5.1 Name the following polygons.

NO.OF SIDES	3	4	5	6	8
NAME					

Table 5

5.2 A “ box” was used to store gas needed for a science experiment. It had a height of 5m; a length of 3m and a breadth of 1m.

5.2.1 What is the correct mathematical name for the above object?

5.2.2 Complete:

No. of faces	No.of edges	No.of vertices

Table 6

5.2.3 Calculate the volume of the gas when the container is full. [Volume = length x breadth x height]

5.2.4 Draw a net of the above object.

5.2.4 Calculate the total surface area of the object.

Total surface area = [2 x area of top face] + [2 x area of front face] + [2 x area of side face]

= [2 x l x b] + [2 x l x h] + [2 x b x h]

= _____

= _____

= _____

[_____/15]

QUESTION 6

6.1 Study the following patterns carefully and then answer the questions set.

PICTURE 1 2 3

NUMBER OF STICKS

6.1.1 Now complete the following table to show the above pattern.

No.of squares	1	2	3	5	10	20
No.of matchsticks						

Table 7

6.1.2 Can you predict how many matchsticks are needed to make 42 boxes?

 6.2 Complete the following table.

Pattern	1	2	3	5	6	9	15	20
Number of marbles	1	4	9					

Table 8

6.2.2 What are you doing to the top number to get the number of marbles?

 6.2.3 What is the special name given to these numbers?

 6.2.4 Write an equation for the above pattern.
