



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

MARKS	
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ANNUAL NATIONAL ASSESSMENT 2013 GRADE 6 MATHEMATICS TEST

MARKS: 75

TIME: 1½ hours

PROVINCE _____

REGION _____

DISTRICT _____

SCHOOL NAME _____

EMIS NUMBER (9 digits)

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CLASS (e.g. 6A) _____

SURNAME _____

NAME _____

GENDER (✓)

BOY

GIRL

DATE OF BIRTH

C	C	Y	Y	M	M	D	D
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This test consists of 14 pages, excluding the cover page.

Instructions to the learner

1. Read all the instructions carefully.
2. Question 1 consists of 10 multiple-choice questions. Circle the letter of the correct answer.
3. Answer questions 2 to 30 in the spaces or frames provided.
4. All working must be done on the question paper and not on rough paper.
5. The test counts 75 marks.
6. The test duration is 1½ hours.
7. The teacher will lead you through the practice exercise before you start the test.
8. You may not use a calculator.

Practice exercise

Circle the letter of the correct answer.

$$8 \times 6 =$$

- A 48
- B 84
- C 72
- D 60

You have answered correctly if you have circled **A** above.

NOTE:

- You will answer more questions like the one you have just completed.
- Do your best to answer each question even if you are not sure of the answer.
- Write down the answer that you think is the best and move to the next question.
- When you have answered all the questions on a page, move to the next page.
- Look only at your own work.

The test starts on the next page.

1. Circle the letter of the correct answer.

1.1 What is the next number in the number sequence?

13 ; 17 ; 21 ; 25 ; _____

A 28

B 29

C 30

D 46

(1)

1.2 Which number is missing in this number pattern?

9,17 ; 9,15 ; 9,13 ; _____ ; 9,09

A 9

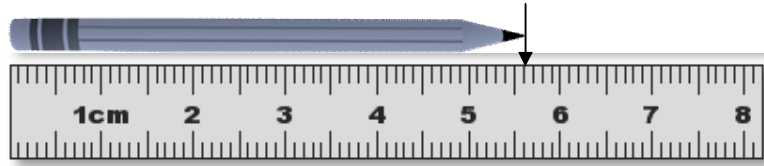
B 9,10

C 9,11

D 9,12

(1)

1.3 What is the length of the pencil shown below?



The length of the pencil is ...

A 56 cm

B 5,6 mm

C 0,56 m

D 5,6 cm

(1)

1.4 $22 + 35 = 63 - \Delta$, means that $\Delta = \dots$

A 6

B 28

C 41

D 57

(1)

1.5 What is the median of the data set below?

20 30 30 40 40 50 50

A 20

B 30

C 40

D 50

(1)

1.6 Round 347 659 off to the nearest 100 000.

A 300 000

B 348 000

C 350 000

D 400 000

(1)

1.7 Which **one** of the following numbers is a factor of 81?

A 7

B 8

C 18

D 27

(1)

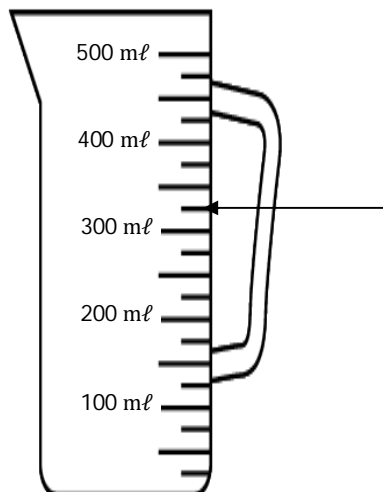
1.8 What capacity does the arrow on the jug indicate?

A 310 ml

B 325 ml

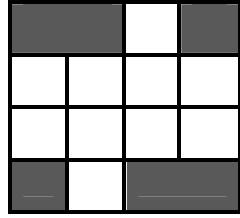
C 320 ml

D 3,1 l



(1)

1.9 What fraction of the diagram is shaded?



A $\frac{1}{4}$

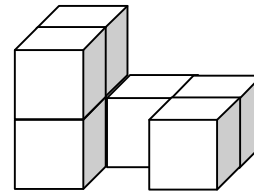
B $\frac{3}{8}$

C $\frac{1}{2}$

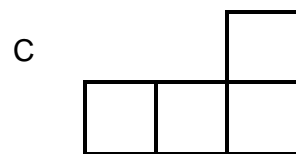
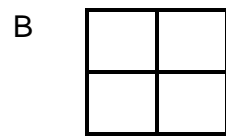
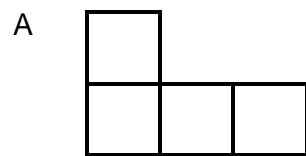
D $\frac{5}{8}$

(1)

1.10 Which 2-D shape below shows the left-hand view of the 3-D object?



Front view



(1)

2. Write the number symbol for the following number:
Three hundred and forty-two million, six hundred and fifty thousand,
seven hundred and ninety-eight.
_____ (1)

3. Write down the next prime number.
19 , 23 , 29 , _____ (1)

4. What is the value of the underlined digit in 45 678 921?
_____ (1)

5. Calculate the answers for questions 5.1 to 5.7.

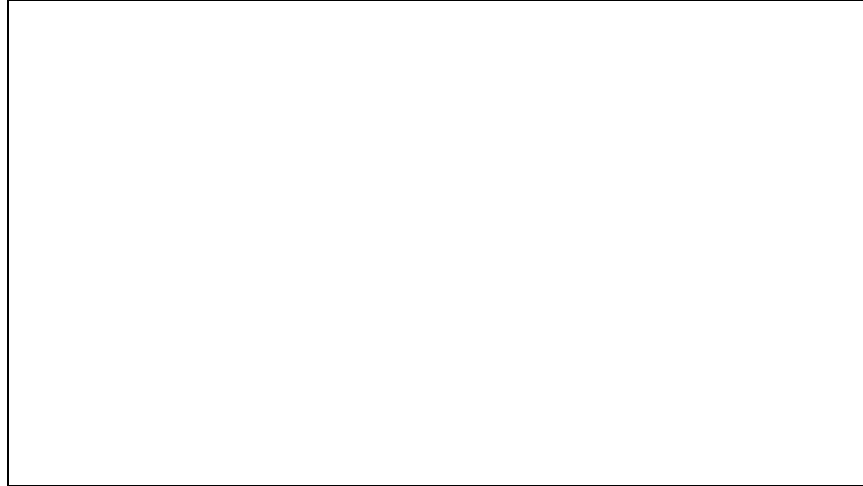
5.1 $43\,489 + 345\,987 + 307$

(2)

5.2 $495\,089 - 85\,847$

(2)

5.3 $3\,097 \times 249$




(4)

5.4 Fill in the missing digits in the division sum.

$$\begin{array}{r} \overline{) 3924} \\ \underline{36} \\ 324 \\ \underline{324} \\ 0 \end{array}$$

(3)

5.5 $4\frac{1}{8} + 3\frac{3}{8}$



(2)

5.6 20% of 400



(2)

5.7 $7,83 + 5,39 - 4,86$



(3)

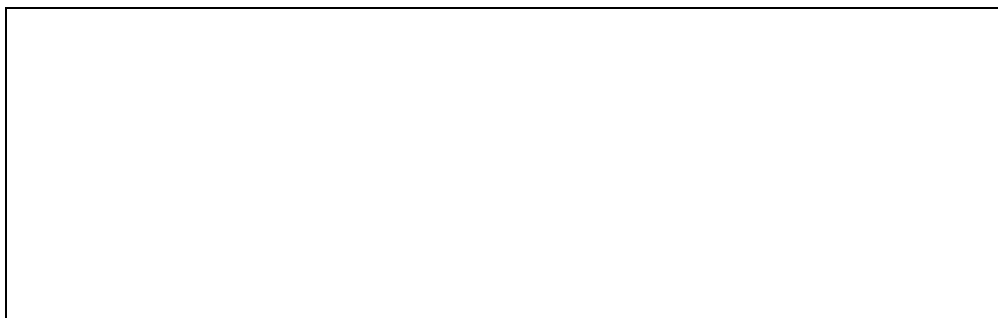
6. Complete: $0 \times (18 - 3) + (10 \div 2) - 2 = \underline{\hspace{2cm}}$

(1)

7. Complete: $2 \times (4 + 5) = (2 \times \underline{\hspace{1cm}}) + (2 \times 5)$

(1)

8. Suzan buys a school bag for R65,81 and a pencil case for R18,23. How much change should she get if she pays with a R100 banknote?



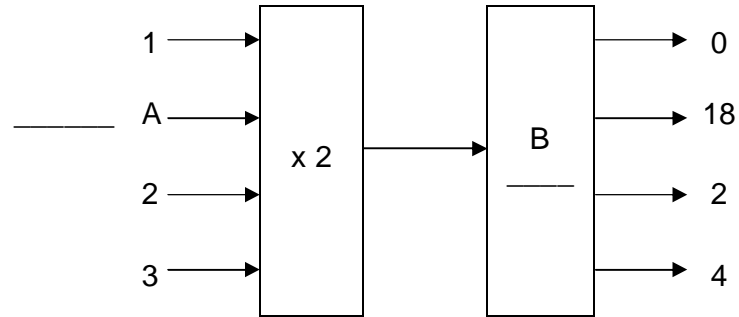
(2)

14. Complete the table:

x	y
1	3
2	7
3	11
8	

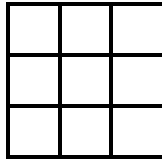
(1)

15. Replace A with a number and B with a rule in the flow diagram below.



(2)

16. How many squares are there in the diagram below?

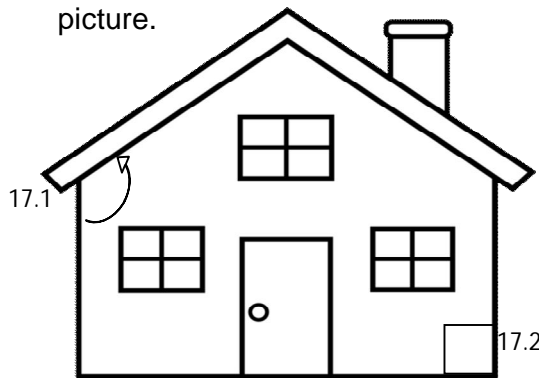


(2)

17.

obtuse angle; acute angle; right angle

Use the above words to say what kind of angles are marked in the picture.

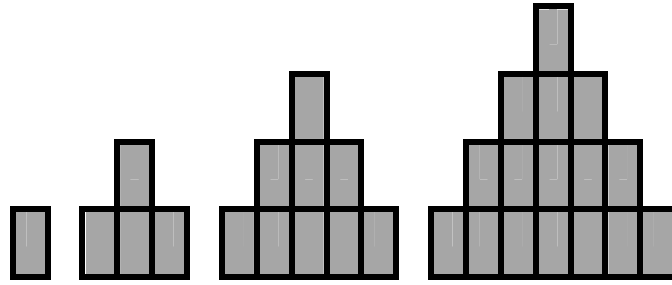


17.1 _____

17.2 _____

(2)

18. Carefully look at the stacks of cans and then complete the table.

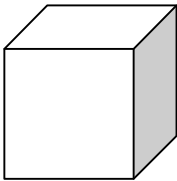
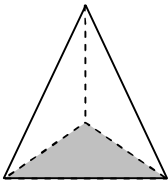


Stack number: 1 2 3 4

Stack number	1	2	3	4		6		
Number of cans	1	4	9	16				64

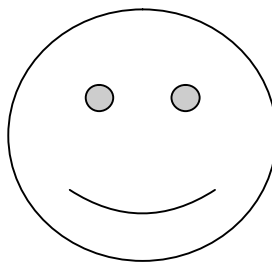
(2)

19. Complete the table:

		
Name of 3-D object	Cube	Triangular pyramid
Number of vertices	8	
Number of edges		6
Number of faces	6	

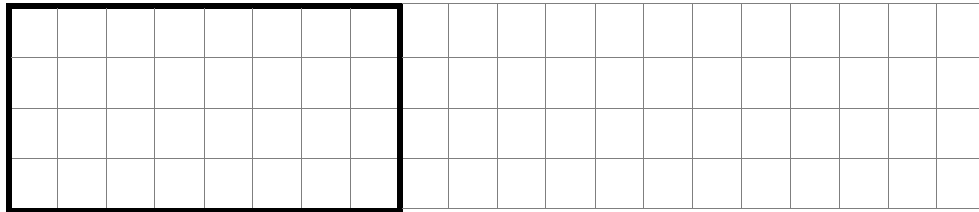
(3)

20. Draw the line(s) of symmetry in the picture.



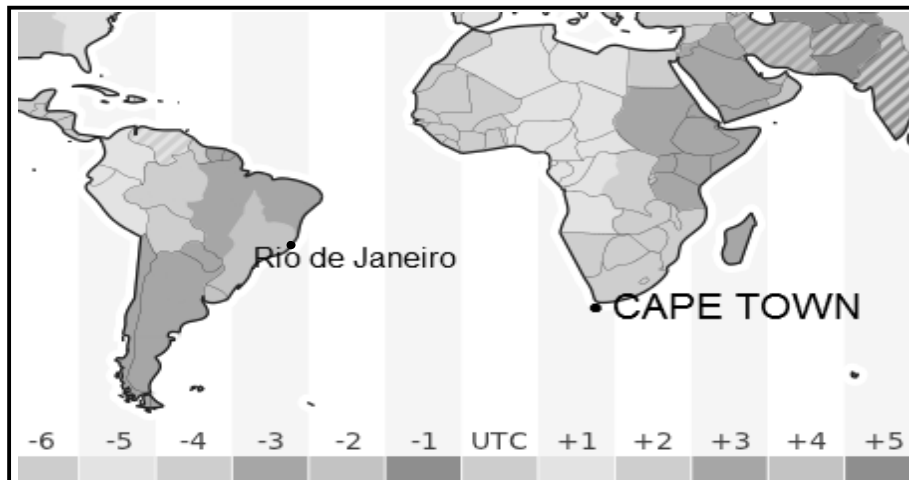
(1)

21. Draw a reduction of the rectangle on the grid so that the size of the new rectangle is a quarter of the size of the original one.



(2)

22. Examine the map below and answer the questions that follow.



22.1 What is the time difference in hours between Cape Town and Rio de Janeiro? _____ (1)

22.2 If it is 11:00 a.m. in Rio de Janeiro, what is the time in Cape Town? _____ (1)

23. Convert to the units as indicated:

23.1 $3 \text{ kl} = \text{_____} \ell$ (1)

23.2 $43,5 \text{ cm} = \text{_____} \text{ m}$ (1)

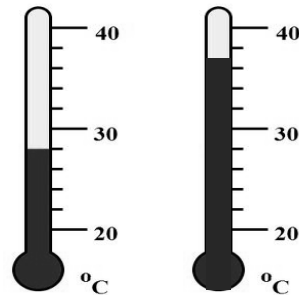
24. Examine the packets of sugar and their prices. Which is the best buy?

Domino SUGAR 2,5 kg R18,95

Domino SUGAR 5 kg R36,95

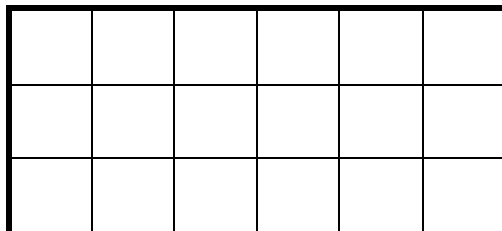
(2)

25. What is the difference in the temperatures indicated on the two thermometers? _____



(1)

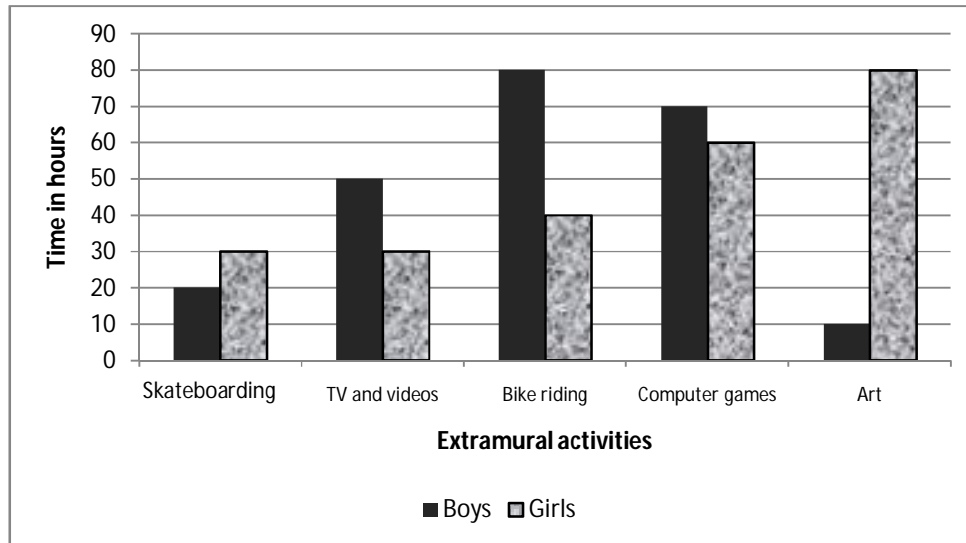
26. The grid below shows the sketch of a rectangular garden which must be fenced. The squares on the grid are each 1,5 m long. What is the length of the fence around the garden?



(2)

27. Examine the double bar graph below and then answer the questions.

BOYS' AND GIRLS' EXTRAMURAL ACTIVITIES



27.1 On which activity do the boys spend most of their time?

_____ (1)

27.2 How much more time do girls spend on Art than boys?

_____ (1)

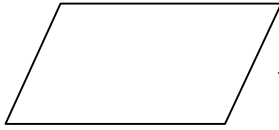
28. What is the mode of the given set of numbers?

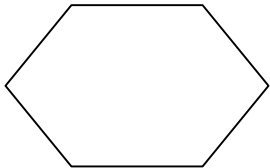
21 22 22 23 23 24 25 25 25

_____ (1)

29. Choose a word from the list to match the shape.

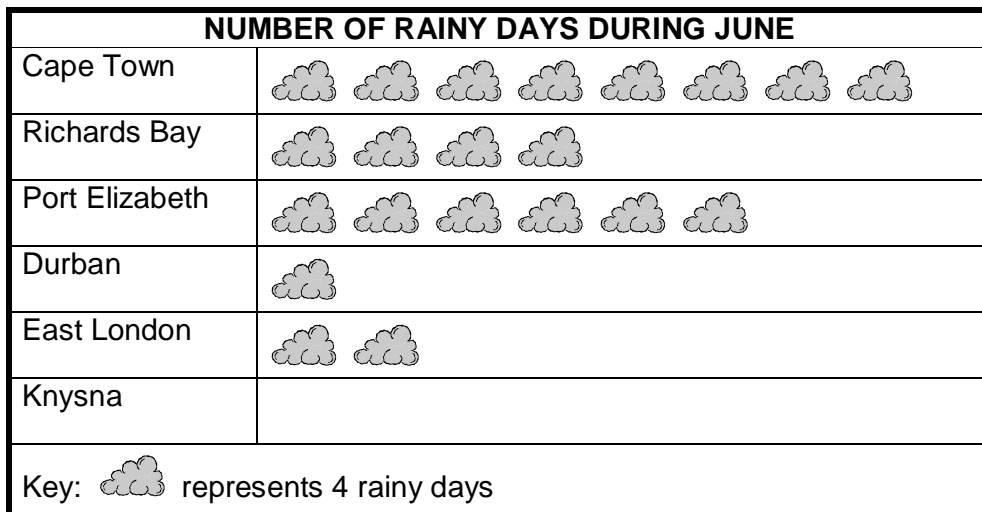
rectangle; parallelogram; pentagon; hexagon





(2)

30. Examine the pictograph below and then answer the questions that follow.



30.1 How many rainy days did Cape Town have? _____ (1)

30.2 Draw pictures on the pictograph to represent 12 rainy days for Knysna. (1)

TOTAL: 75