GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

GAUTENG DEPARTMENT OF EDUCATION
PROVINCIAL EXAMINATION
JUNE 2016
GRADE 6

MATHEMATICS

DISTRICT:

SCHOOL NAME:

CLASS (e.g. 6A):

SURNAME:

NAME:

TIME: 90 minutes

MARKS: 75

13 pages

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TIME: 90 minutes

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INSTRUCTIONS

1.   Read all the instructions carefully.

2.   Answer ALL the questions on this question paper.

3.   Question 1 consists of 10 mutiple-choice questions. Circle the letter of the correct answer.

4.   Answer Questions 2 to 19 in the spaces or frames provided.

5.   All calculations must be shown on the question paper and may not be done on separate paper.

6.   Write neatly and legibly.

7.   The use of a calculator is not allowed.

1. **Circle the letter of the correct answer.**

    1.1   Which number is represented by?
    (7 x 10 000) + (6 x 1 000) + (3 x 100) + (1 x 1)

    A   7 631
    B   70 631
    C   76 310
    D   76 301   (1)

    1.2   What is the value of 21 x 0 + 52?

    A   21
    B   0
    C   73
    D   52   (1)

    1.3   What is the value of the underlined digit in 3 6<u>8</u>1 257?

    A   8 x 1 000
    B   8 x 100 000
    C   8 x 10 000
    D   8 x 100   (1)

    1.4   Which one of the following is a prime number?

    A   39
    B   51
    C   61
    D   87   (1)

    1.5   Which is the tenth number in the pattern 5; 10; 15; 20; …?

    A   25
    B   50
    C   60
    D   100   (1)

    1.6   How many more edges does an octagonal prism have than an
    octagonal pyramid?

    A   10
    B   2
    C   8
    D   16   (1)

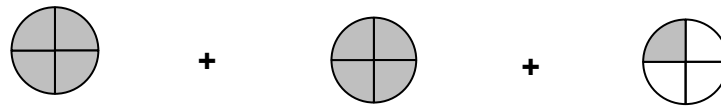1.7   12,5 litres written in millilitres is …

     A   1 250 ml.
     B   12 500 ml.
     C   125 ml.
     D   0,125 ml.   (1)

1.8   Solve the following number sentence $6 \times \triangle - 3 = 39$
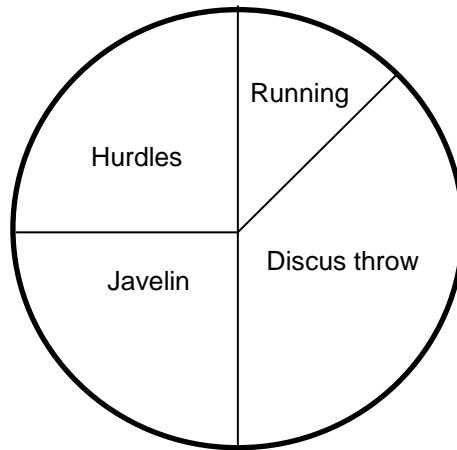 $\triangle$ = _____.

     A   4
     B   6
     C   7
     D   11   (1)

1.9   Which fraction is represented by the shaded parts in the following diagrams?

     A $\dfrac{7}{4}$

     B $\dfrac{11}{4}$

     C $\dfrac{5}{2}$

     D $\dfrac{9}{4}$ (1)

1.10 This pie chart indicates popular athletic events in Grade 6.
Which event is most popular?

A   Discus throw
B   Javelin
C   Hurdles
D   Running   (1)

[10]

2. Round-off the following numbers.

2.1   53 270 to the nearest 100

                      (1)

_____

2.2   728 163 to the nearest 1 000

                      (1)

_____

[2]

3. Calculate the answers for Questions 3.1 to 3.10. You may use any
method. Show all your calculations.

3.1   18 677 + 63 243

                      (2)

3.2   7 584 – 4 759

(2)

3.3   5 734 x 42

(3)

3.4   7 663 ÷ 25

(3)

3.5 $2\dfrac{3}{8} + 4\dfrac{1}{8}$

(2)

3.6 $2\dfrac{1}{4} - 1\dfrac{1}{2}$

(3)

3.7   0,79 + 0,69

(2)

3.8   5,3 – 2,34

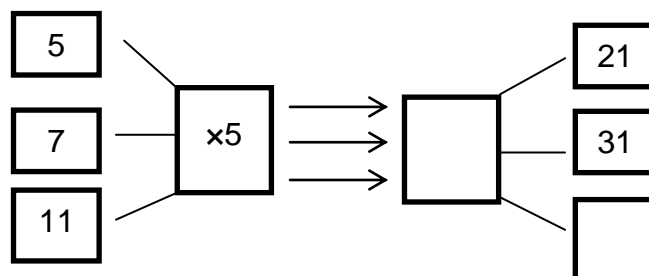(2)

3.9   30% of 120

(2)

3.10   15 + (30 ÷ 6 – 3)

(3)

[24]

4.   Write the following fractions in descending order.

$$\frac{2}{5} \; ; \qquad \frac{1}{4} \; ; \qquad \frac{3}{4} \; ; \qquad \frac{1}{2}$$

_____ **[1]**

5.   Complete the flow diagram by filling the missing answers into the blocks.

5				21
7	×5	→ → →		31
11				

[2]

6.   1; 3; 5; 9 and 45 are factors of 45. Which factor of 45 is missing from the list?

_____ **[1]**

7.   Linda uses circles to form a pattern.
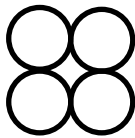
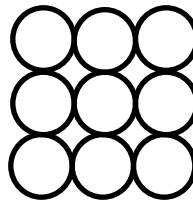Pattern 1   Pattern 2   Pattern 3

If the pattern is continued

7.1   How many circles will there be in Pattern 4? _____   (1)

7.2   How many circles will Linda have in the bottom row of Pattern 5?

_____   (1)

7.3   How many circles will there be in Pattern 12? _____   (1)
[3]

8.   Complete the table below.

Name of 3D object	
Types of faces	
Number of vertices	

[4]

9. The following 2-dimensional shape represents a rectangle. How many lines of symmetry does it have?

Answer: _____ **[1]**

10. Answer the following questions.

10.1 Name a quadrilateral that has a pair of acute angles and a pair of obtuse angles.

_____ (1)

10.2 Name a quadrilateral that has four right angles but is not a square.

_____ (1)
[2]

11. At a birthday party there are 60 guests, if $\dfrac{2}{5}$ of the guests are adults then how many children are there in the party?

[2]

12.   According to international time zones, the time in London is 2 hours later than Johannesburg and the time in Delhi is 3 hours 30 minutes earlier than Johannesburg.

    12.1   What time is it in Delhi if it is 08:00 in Johannesburg?

        _____   (1)

    12.2   What will the time be in London if the time in Delhi is 14:00?

        _____   (3)
        [4]

13.   A farm worker gets paid R150 per day, for 5 days every week. How much will she earn in 6 weeks?

[3]

14.   Jane invited 40 friends to her party. Each friend may drink 2 glasses of cool drink. If each glass holds 250 millilitres, how many 2-litre bottles of cool drink should her mother buy?
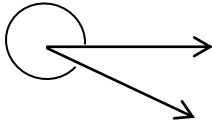
[4]

15.   Write down the time indicated on the clock face:

15.1   In 12-hour time _____   (1)

15.2   In 24-hour time _____   (1)

[2]

16.   Name the following angles

Angle	Name of angle
	16.1 _____
	16.2 _____
	16.3 _____

[3]

17.   The price of a bottle of 1 litre of fresh milk at fifteen shops was found to be:
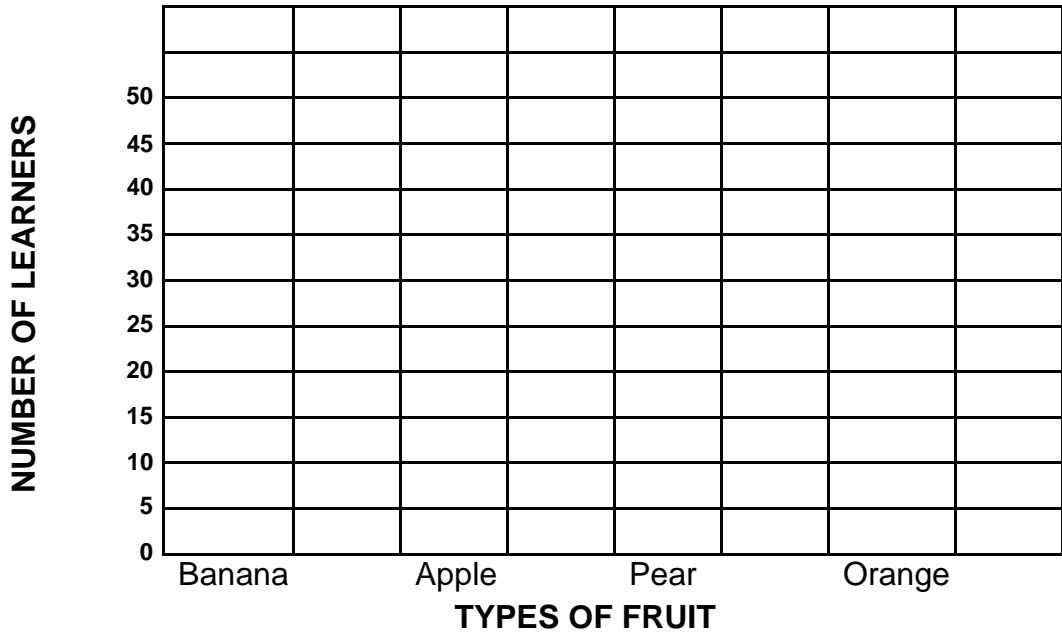
R12;   R12;   R13;   R14;   R13;   R15;   R13,50;   R12;   R11,50;
R13;   R14;   R12;   R11,50;   R12;   R15.

17.1   What is the mode of the price?   _____   (1)

17.2   What is the median of the price? _____   (1)

[2]

18. Below are the results of learners' favourite fruit. Draw a bar graph to represent the given data.

Types of fruit	Number of learners
Banana	35
Apple	30
Pear	25
Orange	40

[3]

19. There are eight people at a party. Each one greets everyone else with a hug. How many hugs were given?

_____ **[2]**

TOTAL: **75**

END