1. Multiple-choice questions.

1.1 9 347 879 **rounded off** to the **nearest 1 000 is**?

A 9 348 000
B 9 348 300
C 9 347 380
D 9 347 370 (1)

1.2 Give the **value** of the underlined digit in 23,<u>6</u>54?

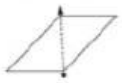
A Sixty
B Six tenth
C Six hundredth
D Six thousandth (1)

1.3 Write down the **missing term** in the sequence.

5; 10; _____; 40; 80

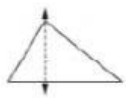
A 25
B 30
C 15
D 20 (1)

1.4 Which one of the following figures has only **ONE symmetry line**?

A 

B 

C 

D 

(1)

1.5 Calculate:
$4 + 2 \times 4 =$

A 24
B 32
C 12
D 10 (1)

1.6 Choose the factors of 20 from the following:

A 1; 2; 4; 5; 10; 15; 20
B 1; 2; 4; 5; 10; 20
C 1; 2; 4; 8; 10; 20
D 1; 2; 4; 5; 12; 20 (1)

1.7 Which one is the **lowest common multiple** of 8 and 24?

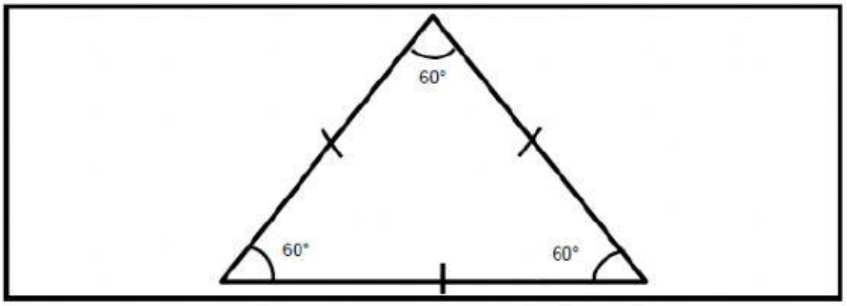
A 8
B 24
C 32
D 192 (1)

1.8 Write down the **value of p**:

$p - 8 = 4$

A 4
B 6
C 12
D 2 (1)

1.9 What type of triangle is this?



A Right angled triangle
B Obtuse angled triangle
C Equilateral triangle
D Isosceles triangle (1)

1.10 Calculate:

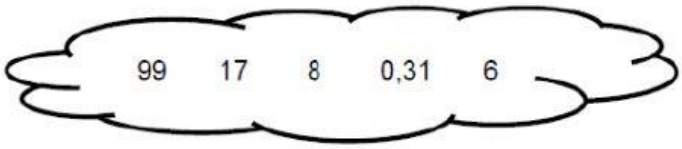
$(-6) + 4 =$

A -10
B -2
C 2
D 10 (1)

[10]

2. Choose one number from the list to answer the following statement:

The biggest prime factor of 17: _____ (1)



3. **Use** the **number line** to calculate the following:

3.1 $6 + (-8) + (-2) =$

(1)

3.2 Calculate: $-5 - (-13) =$ _____ (1)

4. Determine the value of x.

4.1 $3x = 27$

_____ (1)

4.2 $\frac{x}{5} = 10$

_____ (1)

5. **Simplify:**

5.1 $\frac{4}{5} \times 3\frac{1}{3} =$ (2)

5.2 $324{,}348 + 17{,}879 - 6{,}507 =$ (2)

5.3 $0{,}048 \div 8 =$ (2)

5.4 $\sqrt{144} - 2^4 - 4 + \sqrt[3]{27} =$ (3)

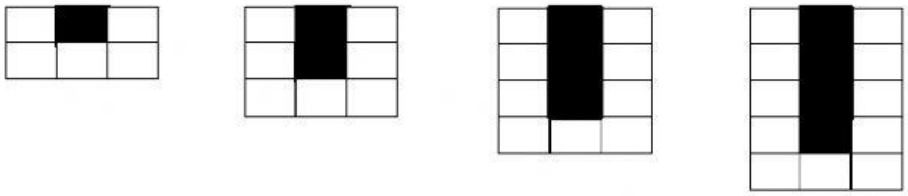
5.5 Shoes are marked down from R600 to R324.
What percentage is the discount? (2)

5.6 32 Grade 7 learners watched rugby. The ratio of the number of boys to that of girls was 5 : 3. How many girls were there? (3)

5.7 A bank gives 5% interest a year. If there is R1 500 in an account, what will be in the account after 2 years. (3)

5.8 Themba is 12 years old. His brother is $\frac{1}{2}$ his age but he is twice as old as his sister. How old is his sister? (2)

6. Study the following diagram pattern and then complete the table.



NUMBER OF BLACK TILES	NUMBER OF WHITE TILES	
1	5	
2	7	
3	9	
4	11	
5	(6.1) _____	(1)
(6.2) _____	103	(1)
n	(6.3) _____	(1)

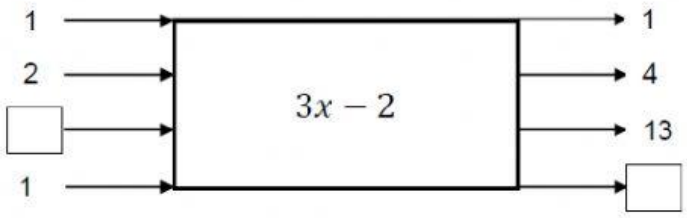
6.4 Use your own words to describe the rule observed in the pattern given above.

_____

_____

_____ (2)

7. Complete the following flow diagram.



(2)

8. Study the table below and answer the question.

x	1	2	3	4
y	5	10	15	20

8.1 Describe the relationship of x and y in your own words:

_____

_____

_____ (2)

8.2 Express the relationship between x and y as an equation.

_____ (2)

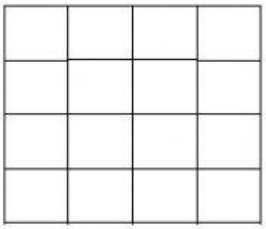
9. Use substitution to solve the following:

If **a = 12**; **b = 8** and **c = 4**

9.1 $b \div c + 5^2 =$ _____ (1)

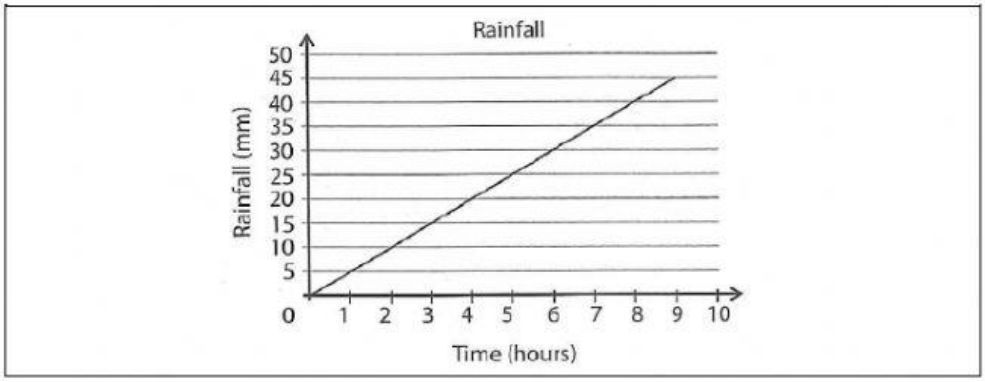
9.2 $\sqrt{c} \times a =$ _____ (1)

10. How many squares of different sizes are there in the following figure?



_____ (2)

11. The graph below shows the rainfall in a particular area.



11.1 For how long was the rainfall measured?

_____ (1)

11.2 How much rain has fallen after 5 hours?

_____ (1)

11.3 Is this a linear or non-linear relationship?

_____ (1)

11.4 Predict what the rainfall would be after 10 hours. Motivate your answer.

_____

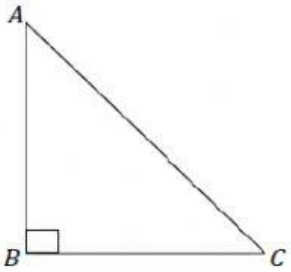
_____ (2)

12. Sipho works 8 hours and earns R920 per day. How much does he earn per hour?

_____

_____ (2)

13. In the right-angled triangle below, angle $\hat{A} = 45°$, determine the size of angle $\hat{C}$ and give a reason for your answer.

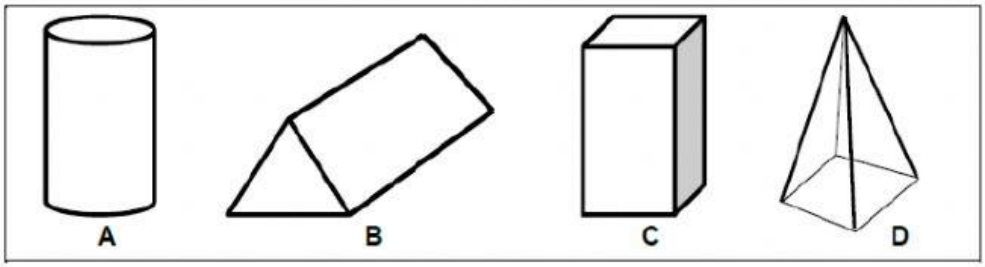


_____

_____

_____ (2)

14. Use the objects below to answer the following questions.



14.1 Which object is a triangular prism? _____ (1)

14.2 Give the object that has eight vertices. _____ (1)

14.3 Identify the object with an apex. _____ (1)

14.4 Which object has two edges? _____ (1)

14.5 Write down the name of object **A**. _____ (1)