

REVISION 14
Section B
[20 marks]
Answer all the equations.

1. a) Determine whether each of the following statements is 'True' or 'False'

i) 5 is a prime factor of 20
ii) 3 is a prime factor of 29
iii) 4 is a prime factor of 16

[3 marks]

b) The number sequence in the answer space is Fibonacci Numbers. Complete the number sequence.

Answer:

..., , 21, 34, 55,

[2 marks]

2. a) Complete the table in the answers space.

Single number	Standard form
0.000742	<input type="text"/>
	3.6×10^5
5879	<input type="text"/>

[3 marks]

2.b) Given $\xi = \{\text{letter in the word 'B A D M I N T O N'}\}$ and $P = \{\text{vowels}\}$. Complete the table in the answer space.

Number of elements in ξ	
Complement of set P	{ } <input type="text"/>

[2 marks]

3.a) Diagram 10 shows an irregular polygon

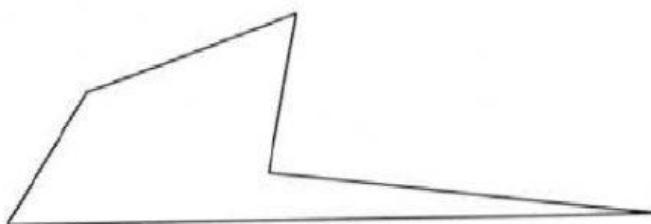


Diagram 10

Determine the sum of exterior angles and the sum of interior angles of the polygon.

Sum of exterior angles	
Sum of interior angles	

[2 marks]

3. b) Match the equations with the correct gradient.

$$y = \frac{1}{4}x - 5$$

$$-9$$

$$2y = -x - \frac{1}{6}$$

$$-\frac{1}{2}$$

$$\frac{3x}{2} + \frac{y}{6} = 1$$

$$\frac{1}{4}$$

[3 marks]

c) In Diagram 12, MNP is a tangent to the circle with centre O at point N. Find the value of x .

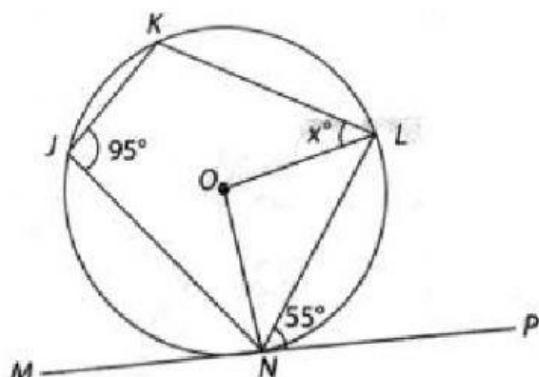


Diagram 12

Answer:

$$x =$$

$$=$$

[2 marks]

Section C
Answers all the equations

1. a) Find the value of each of the following.

i) $27 - \sqrt[3]{-8}$

ii) $(-3)^3 + \sqrt[3]{\frac{27}{216}} - \sqrt{0.0081}$

[4 marks]

Answer:

i) _____ ii) _____

= - () = () _____

= _____

b) Solve the following simultaneous linear equation.

$$\begin{aligned}3g + h &= 1 \\-2g + 2h &= 10\end{aligned}$$

[3 marks]

Answer:

$$\begin{aligned}3g + h &= 1 \quad \dots \text{eqn 1} \\-2g + 2h &= 10 \quad \dots \text{eqn 2}\end{aligned}$$

Substitute $g =$ in eqn 1

Eqn. 1 x 2

$$() + =$$

$$+ = \dots \text{eqn 3}$$

$$h =$$

Eqn 2 - eqn 3

$$+ = \dots \text{eqn 2}$$

$$+ = \dots \text{eqn 3}$$

$$g =$$

2.

a) Solve the following simultaneous linear inequalities

$$3x - 1 > 8 \text{ and } x \geq 2x - 6$$

[3 marks]

Answer:

x

\geq

x

x

x

b) Diagram 19 shows the distribution of student's quiz marks.

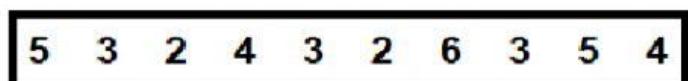


Diagram 19

Find the value of median

Answer: