

**REVISION 3**  
**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) Diagram 10 shows an irregular polygon

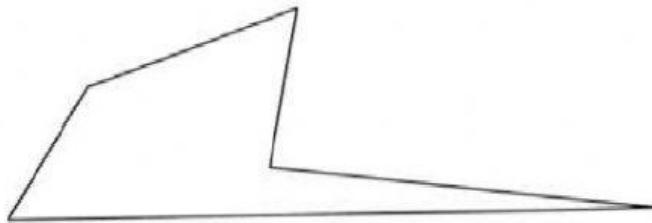


Diagram 10

Determine the number of sides and the name of the polygon.

Number of sides	
name	

[2 marks]

2.a) 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 $\xi$	
Complement of set P	{ }

[2 marks]

**Section C**  
**[ 60 marks]**  
**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:

$3g + h = 1$  ..... eqn 1

$-2g + 2h = 10$  ..... eqn 2

Substitute  $g =$  in eqn 1

Eqn. 1 x 2

( ) + \_\_\_\_\_ =

\_\_\_\_\_ + \_\_\_\_\_ = ..... eqn 3

$h =$

Eqn 2 - eqn 3

\_\_\_\_\_ + \_\_\_\_\_ = ..... eqn 2

\_\_\_\_\_ + \_\_\_\_\_ = ..... eqn 3

$g =$

2.

a) Solve the following simultaneous linear inequalities

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

[3 marks]

Answer:

$>$

$\geq$

$x$

$x$

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

5	3	2	4	3	2	6	3	5	4
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Diagram 19

Complete the frequency table below:

Quiz mark	Number of students
2	
3	
4	
5	
6	

Determine the quiz mark with the highest frequency