

# EXAM BASED REVISION 1

## Instruction :

1. This question paper consists of 2 sections: Section A and Section B
2. Answer all the questions in Section A, Section B.
3. Click at the chosen for section A and type all your answers in the space provided in section B
4. The diagram in the questions provided are not drawn to scale unless stated.
5. You may use a non-programmable scientific calculator.

Name: \_\_\_\_\_

Class: \_\_\_\_\_

## Section A

[20 marks]

Answer all the questions.

1. Which of the following groups of fractions is arranged in descending order?

A.  $\frac{1}{6}, \frac{2}{5}, \frac{2}{3}$

C.  $\frac{2}{9}, \frac{3}{9}, \frac{1}{3}$

B.  $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}$

D.  $\frac{2}{5}, \frac{3}{10}, \frac{3}{5}$

2. State all the prime factors of 156.

A. 2, 3, 7

C. 2, 13, 19

B. 2, 3, 13

D. 3, 7, 29

3. Express 0.0000215 in standard form

A.  $2.15 \times 10^{-5}$

C.  $2.15 \times 10^4$

B.  $2.15 \times 10^{-4}$

D.  $2.15 \times 10^5$

4. In Diagram 1, PQRS, YXWV and WUT are straight lines.

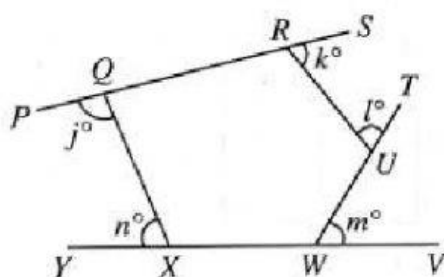


Diagram 1

Find the value of  $j + k + l + m + n$

A. 180

C. 540

B. 360

D. 720

5. If  $10^{x-1} = \frac{1}{10000}$ , Find the value of  $10^x$

A.  $10^2$

C.  $\frac{1}{10^2}$

B.  $10^3$

D.  $\frac{1}{10^3}$

6. Find the value of  $17.5 + 0.236 \times 38$ , and round off correct to three significant figures.

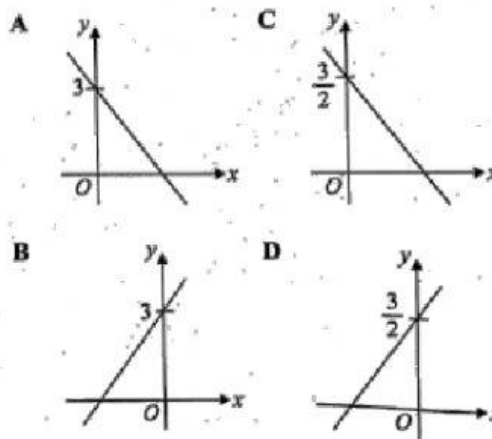
A. 26.4

C. 26.6

B. 26.5

D. 26.7

7. Which of the following graphs represent  $2y + 4x = 3$ ?



8. Puan Lim has deposited RM4000 in a bank and the interest is compounded twice a year at 6%. How much money does Puan Lim have at the end of the year?

A. RM4120.00

C. RM4243.60

B. RM4240.00

D. RM4494.40

9. In Diagram 2,  $\sin \theta = \frac{5}{13}$  and QRS is a straight line. Find the length of RS in cm.

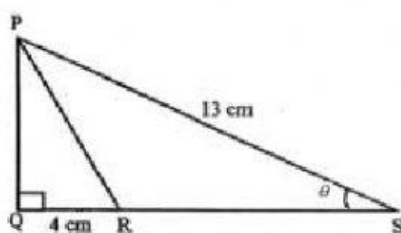


Diagram 2

- A. 6  
B. 7  
C. 8  
D. 9
10. Given that  $\frac{7}{3p+q} = 2$  express p in term of q

- A.  $\frac{5-q}{3}$   
B.  $\frac{14-q}{3}$   
C.  $\frac{7-q}{6}$   
D.  $\frac{7-2q}{6}$

11. Diagram 3 shows a Venn Diagram

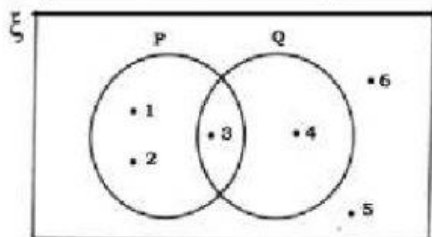


Diagram 3

List the elements for  $P'$ .

- A. 3, 4  
B. 4, 5, 6  
C. 3, 4, 5  
D. 3, 4, 5, 6

12. In the Diagram 4, MJK and KLM are isosceles triangles.

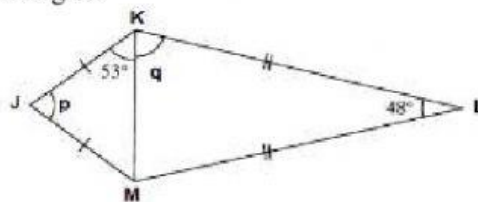


Diagram 4

Find the value of  $p + q$

- A. 140  
B. 142  
C. 144  
D. 146

13. The diagram shows a hollow concrete cylinder with an external diameter of 7 m and an internal diameter of 4 m. Calculate the volume of concrete needed to make the cylinder.

[Use  $\pi = \frac{22}{7}$ ]

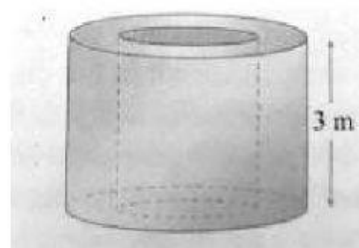


Diagram 5

- A. 77.79 m<sup>3</sup>  
B. 78.79 m<sup>3</sup>  
C. 79.79 m<sup>3</sup>  
D. 80.79 m<sup>3</sup>

14. Diagram 6 shows the plan of composite shape made up of solid P and a solid Q.

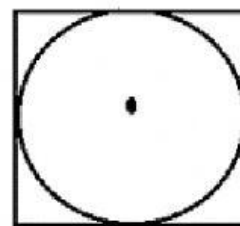


Diagram 6

Determine the possible solids P and Q

|    | Solid P | Solid Q  |
|----|---------|----------|
| A. | Cuboid  | Cylinder |
| B. | Cuboid  | Cone     |
| C. | Cube    | Prism    |
| D. | Cube    | Cylinder |

15. Which of the following expressed in simplest form?

- A.  $2x + 3 - 4y + 1$
- B.  $4x + 7y - 2y - 3$
- C.  $4xy + 3z - 5$
- D.  $3x^2 \times x \times 2xy$

16. Diagram 7 shows a hexagonal card divided into six equal triangles.

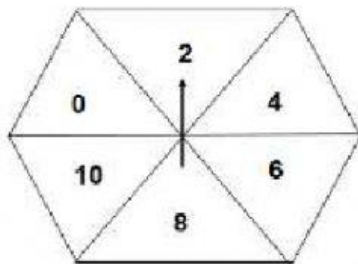


Diagram 7

The pointer is spun. Find the probability of the pointer stops at prime number.

- A. 0
- B.  $\frac{1}{6}$
- C.  $\frac{1}{2}$
- D. 1

17. A car moves at a speed of  $120 \text{ km h}^{-1}$ . Find the distance, in km, travelled by the car in 90 minutes.

- A. 80
- B. 120
- C. 170
- D. 180

18. Diagram 8 is a bar chart showing the number of boys and girls in four sport houses in a school.

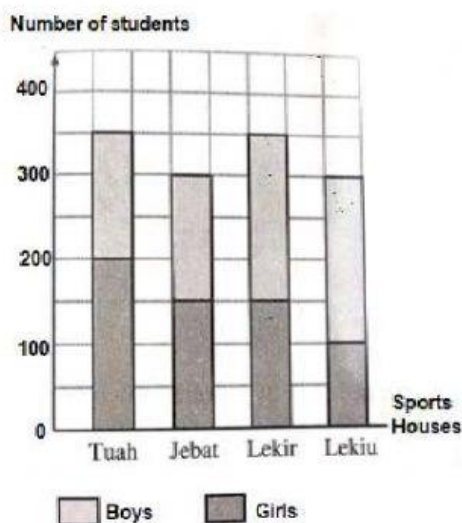


Diagram 8

Which statement is correct based on this bar chart?

- A. The total number of girls is more than the total numbers of boys.
- B. Two sport houses have more girls than boys.
- C. Three sports houses have more boys than girls.
- D. Only one sports house has an equal number of boys and girls

19. Find the solution for  $-2x \leq 2(x + 8)$

- A.  $x \geq -4$
- B.  $x \leq -4$
- C.  $x \geq -16$
- D.  $x \leq -16$

20. Diagram 9 is drawn on a grid of equal squares.

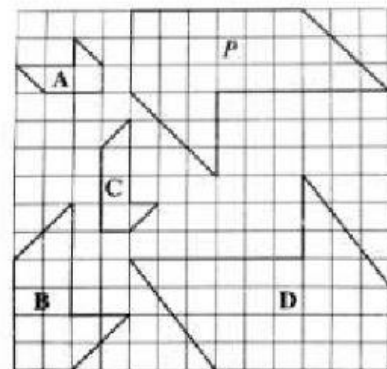


Diagram 9

Which of the polygons, A, B, C or D is the scale drawing of P using the scale of 1: 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]

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

| Single number | Standard form     |
|---------------|-------------------|
| 0.000742      | <b>X</b>          |
|               | $3.6 \times 10^5$ |
| 5879          | <b>X</b>          |

[3 marks]

b) Diagram 10 shows an irregular polygon

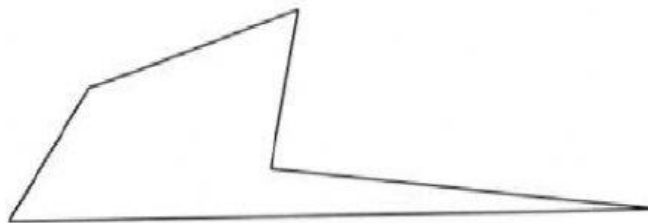


Diagram 10

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]

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 $\xi$ |  |
| Complement of set P         |  |

[2 marks]

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

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

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

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

$$-9$$

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

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

[3 marks]