

Diagram 2

The value of  $x$  is

- |   |    |   |     |
|---|----|---|-----|
| A | 25 | C | 115 |
| B | 95 | D | 130 |

- 9 Diagram 3 shows five triangles drawn on square grids

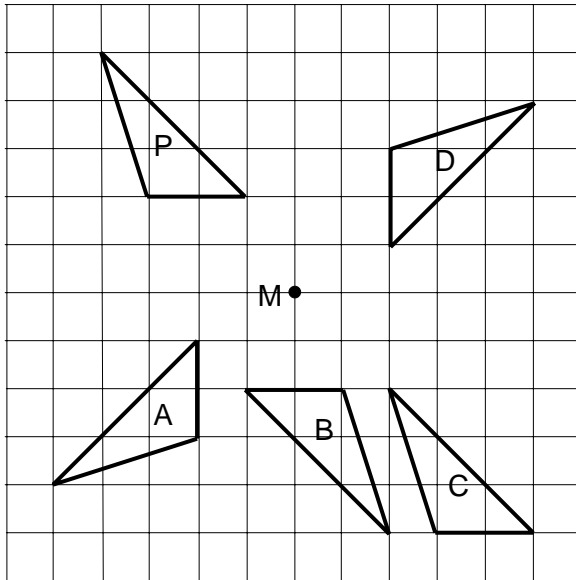


Diagram 3

Which of the triangle **A**, **B**, **C** or **D** is the image of triangle P under rotation of  $90^\circ$  clockwise about the centre M ?

- 10 In Diagram 4, the rectangle PQRS is the image of the rectangle JKLM under a reflection.

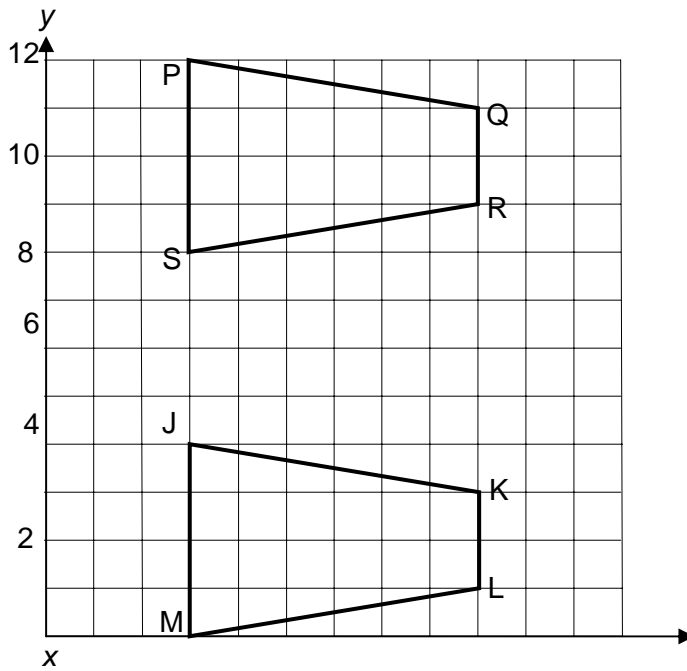
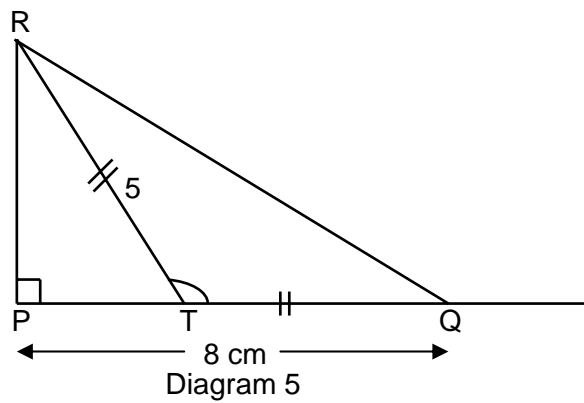


Diagram 4

Which of the following is the axis symmetry of the transformation ?

- A  $y = 6$
- B  $x = 6$
- C  $y = 5$
- D  $x = 5$

11 Diagram 5 shows a right-angle triangle PQR . PTQ is a straight line.



Find the value of  $\tan \angle RTQ$

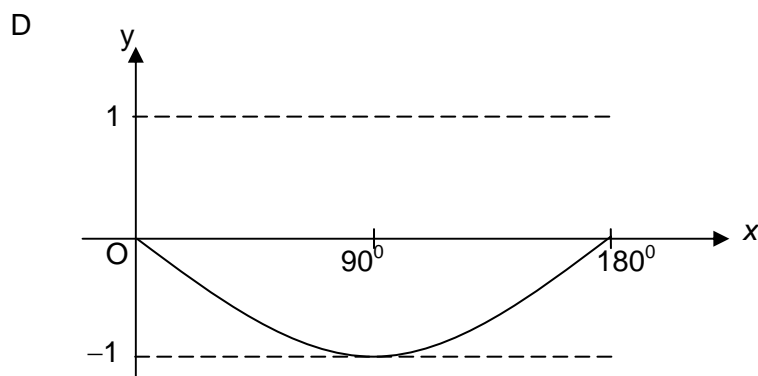
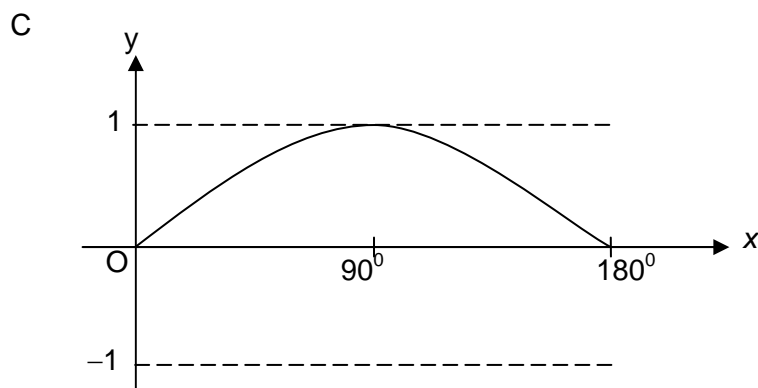
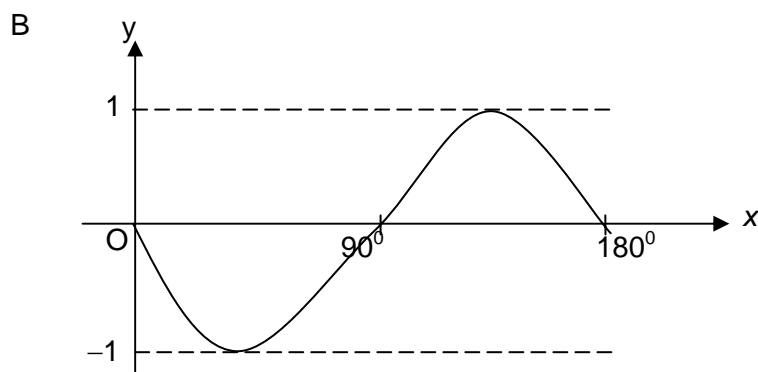
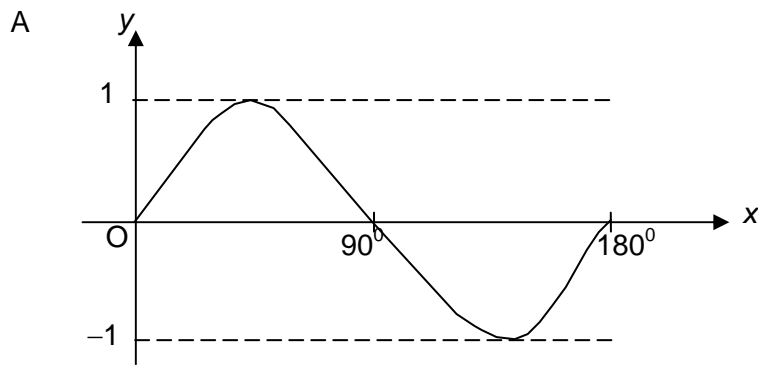
- A  $\frac{4}{5}$
- B  $\frac{4}{3}$
- C  $\frac{3}{5}$
- D  $\frac{4}{3}$

12  $\cos \theta = -0.025$  and  $180^\circ \leq \theta \leq 360^\circ$ . Find the value of  $\theta$ .

A  $268^{\circ}34'$   
B  $271^{\circ}26'$

C  $181^{\circ}26'$   
D  $358^{\circ}34'$

13 Which of the following graphs represents the graph of  $y = \sin x$  for  $0^{\circ} \leq \theta \leq 180^{\circ}$  ?



14 Diagram 6 shows a right-angled triangular prism with the horizontal base ABCD

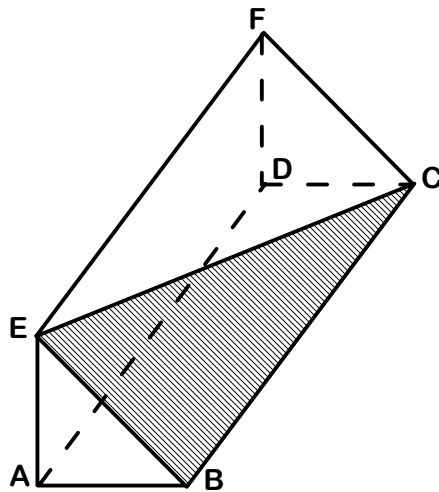


Diagram 6

What is the angle between the plane EBC and the base ABCD?

- |   |              |   |              |
|---|--------------|---|--------------|
| A | $\angle EBC$ | C | $\angle ECD$ |
| B | $\angle EBA$ | D | $\angle ECB$ |

- 15 Diagram 7 shows two vertical poles, PS and QR, on a horizontal plane.

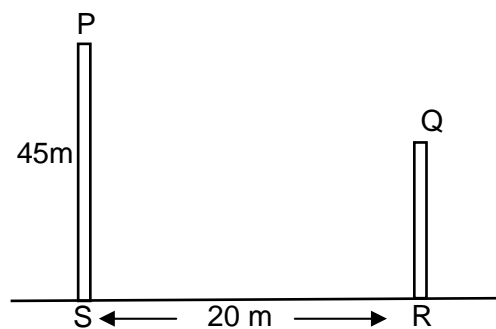


Diagram 7

The angle of depression of vertex Q from vertex P is  $25^\circ$ . Calculate the height of pole QR in m.

- |   |      |   |       |
|---|------|---|-------|
| A | 2.1  | C | 26.87 |
| B | 9.33 | D | 35.67 |

- 16 In diagram 8, JK and LM are two vertical poles on a horizontal plane. The height of LM is twice the height of JK. The angle of elevation of vertex J from M is  $35^\circ$ .

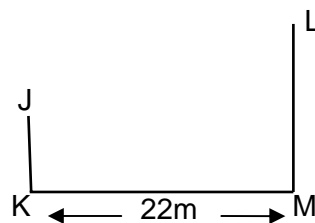


Diagram 8

Calculate the height, in m of LM

- |   |      |   |       |
|---|------|---|-------|
| A | 15.4 | C | 31.42 |
| B | 30.8 | D | 36.04 |

- 17 Diagram 9 shows the position of point M and N.

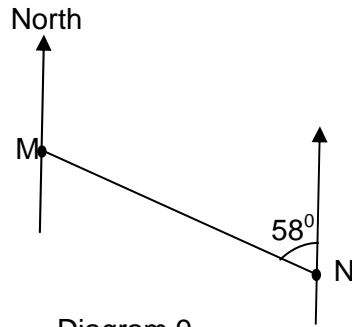


Diagram 9

Find the bearing of point M from point N.

- |   |               |   |               |
|---|---------------|---|---------------|
| A | $032^{\circ}$ | C | $148^{\circ}$ |
| B | $122^{\circ}$ | D | $302^{\circ}$ |

18 Express  $\frac{5}{6e} - \frac{h-2}{2eh}$  as a single fraction in its simplest form.

- |   |                    |   |                   |
|---|--------------------|---|-------------------|
| A | $\frac{2h+1}{3eh}$ | C | $\frac{h-3}{3eh}$ |
| B | $\frac{2h-1}{3eh}$ | D | $\frac{h+3}{3eh}$ |

19 In diagram 10, N is the North Pole, S is the South Pole and NOS is the axis of the earth.

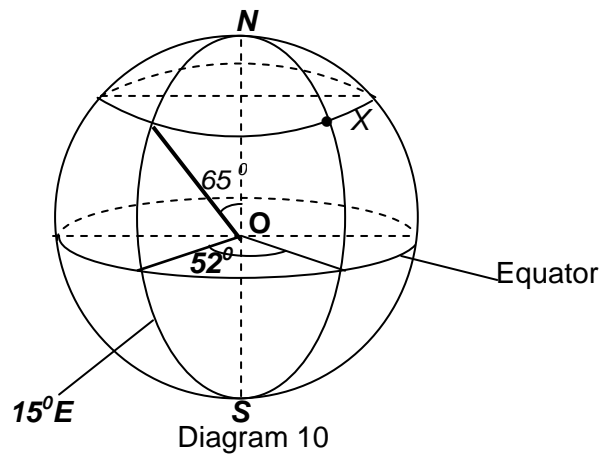


Diagram 10

Find the position of point X.

- |   |                                                |   |                                                |
|---|------------------------------------------------|---|------------------------------------------------|
| A | $(65^{\circ} \text{ N}, 37^{\circ} \text{ T})$ | C | $(25^{\circ} \text{ N}, 37^{\circ} \text{ E})$ |
| B | $(65^{\circ} \text{ N}, 67^{\circ} \text{ E})$ | D | $(25^{\circ} \text{ N}, 67^{\circ} \text{ E})$ |

20  $7pq - 2p(3 - q) =$

- |   |            |   |             |
|---|------------|---|-------------|
| A | $4pq - 6p$ | C | $9pq - 6p$  |
| B | $5pq - 6p$ | D | $13pq - 6p$ |

21 Given that  $w = \frac{3a-2b}{a}$ , express  $a$  in term of  $w$  and  $b$ .

A  $\frac{2b}{3+w}$

C  $\frac{3-2b}{w}$

B  $\frac{2b}{3-w}$

D  $\frac{2b+w}{3}$

22 Given that  $\frac{2p-1}{3} = 2p-5$ , calculate the value of  $p$

A -2

C  $\frac{7}{2}$

B 2

D  $-\frac{7}{2}$

23 Given that  $3^{12} \div n^m = 3^2$ , find the value of  $m$  and  $n$ .

A  $n=10, m=3$

C  $n=3, m=-10$

B  $n=10, m=-3$

D  $n=3, m=10$

24 Simplify :

$$\frac{2m^3n}{(3mn^{-2})^3}$$

A  $\frac{2}{27}n^7$

C  $\frac{2}{27}n^{-5}$

B  $\frac{2}{9}n^7$

D  $\frac{2}{9}n^{-5}$

25 List all the integers  $x$  which satisfy both the inequalities

$$\frac{2}{3}x - 6 \geq -4 \text{ and } 9 - \frac{x}{8} > 8$$

A 3,4,5,6,7,8

C 4,5,6,7,8

B 3,4,5,6,7

D 4,5,6,7

26 Table 1 is a frequency table which shows the mass of 30 pupils of class 5 Bestari.

Mass of pupils (kg)	Frequency
41 - 45	5
46 - 50	6
51 - 55	9
56 - 60	3
61 - 65	7

Table 1

Calculate the mean mass of the pupils.

A 50.2

C 52.17

B 51.17

D 53.17



set M. The total number of students is 42.

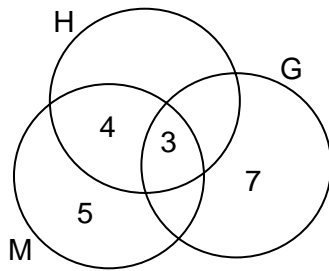


Diagram 11

Given

$G = \{\text{Students who like Geography}\}$

$H = \{\text{Students who like History}\}$

$M = \{\text{Students who like Mathematics}\}$

$$\xi = H \cup G \cup M$$

The number of students who like Mathematics is 16. The number of students who like Geography is 20. Calculate the number of students who like one subject only.

- A 14  
B 25

- C 29  
D 39

32 Diagram 12 shows the relation between set  $\xi$ , set J and set K.

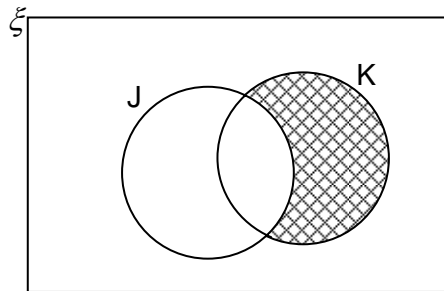


Diagram 12

Given  $n(\xi) = 40$ ,  $n(J \cap K) = 5$ ,  $n(J) = 18$  and  $n(J \cup K)' = 8$ .  
Calculate the number of elements in the shaded region.

- A 9  
B 14

- C 19  
D 24

33 Find the value of  $q$  if the line joining the points  $(5, 8)$  and  $(3, q)$  is parallel to the line  $4y - 2x = 15$ .

- A -12  
B -9

- C 4  
D 7

34 A box contains 50 marbles. There are blue marbles and red marbles. A marble is chosen at random from the box. The probability that a red marble is chosen is  $\frac{2}{5}$ .

How many red marbles need to be added to the box so that the probability that a red marble is chosen is  $\frac{2}{3}$ ?

- A 10  
B 20

- C 40  
D 45

35 Table 2 shows the distribution of a group of 120 pupils playing a game.



39 Simplify  $\begin{pmatrix} -3 \\ 4 \end{pmatrix} - 5\begin{pmatrix} 2 \\ -3 \end{pmatrix} + \begin{pmatrix} 7 \\ -6 \end{pmatrix}$

A  $\begin{pmatrix} -6 \\ 13 \end{pmatrix}$

B  $\begin{pmatrix} -20 \\ 13 \end{pmatrix}$

C  $\begin{pmatrix} -6 \\ -17 \end{pmatrix}$

D  $\begin{pmatrix} 2 \\ -5 \end{pmatrix}$

40 If  $\begin{pmatrix} 4 & -9 \\ -3 & 5 \end{pmatrix} + 2\begin{pmatrix} 1 & 0 \\ n & -2 \end{pmatrix} = \begin{pmatrix} 6 & -9 \\ -11 & 1 \end{pmatrix}$ , then  $n =$

A -8  
B -7

C -6  
D -4

GERAK GEMPUR – SET 2

- 1 Round off 0.006872 correct to two significant figure.
- |   |        |   |        |
|---|--------|---|--------|
| A | 0.0060 | C | 0.0069 |
| B | 0.0070 | D | 0.0068 |
- 2 Express 2570000 in standard form.
- |   |                    |   |                       |
|---|--------------------|---|-----------------------|
| A | $2.57 \times 10^4$ | C | $2.57 \times 10^{-4}$ |
| B | $2.57 \times 10^6$ | D | $2.57 \times 10^{-6}$ |
- 3 
$$\frac{0.07}{5000000}$$
- |   |                      |   |                   |
|---|----------------------|---|-------------------|
| A | $1.4 \times 10^{-8}$ | C | $1.4 \times 10^3$ |
| B | $1.4 \times 10^{-6}$ | D | $1.4 \times 10^4$ |
- 4 450 pieces of A4 size paper make up one ream of paper. If each piece of paper has a mass of 270 milligrams, the mass of two reams of papers in grams is
- |   |                     |   |                    |
|---|---------------------|---|--------------------|
| A | $1.215 \times 10^2$ | C | $2.43 \times 10^2$ |
| B | $1.215 \times 10^5$ | D | $2.43 \times 10^5$ |
- 5 Express  $305_5$  as a number in base eight.
- |   |         |   |         |
|---|---------|---|---------|
| A | $80_8$  | C | $461_8$ |
| B | $120_8$ | D | $620_8$ |
- 6 Given  $5 \times 8^4 + 6 \times 8^3 + 2p + 1 = 56031_8$ , find the value of  $p$
- |   |   |   |    |
|---|---|---|----|
| A | 3 | C | 12 |
| B | 8 | D | 24 |
- 7 In diagram 1, PQRST is a regular pentagon. USW, TRW and ZTS are straight line.

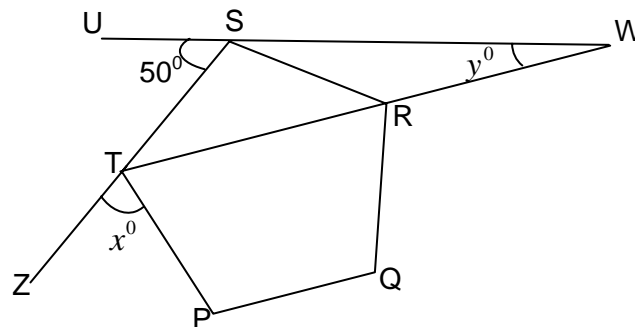


Diagram 1

Find the value of  $x + y$ .

- |   |            |   |             |
|---|------------|---|-------------|
| A | $68^\circ$ | C | $98^\circ$  |
| B | $86^\circ$ | D | $122^\circ$ |



- 11 Diagram 5 shows that pentagon K is the image of pentagon L under a transformation.

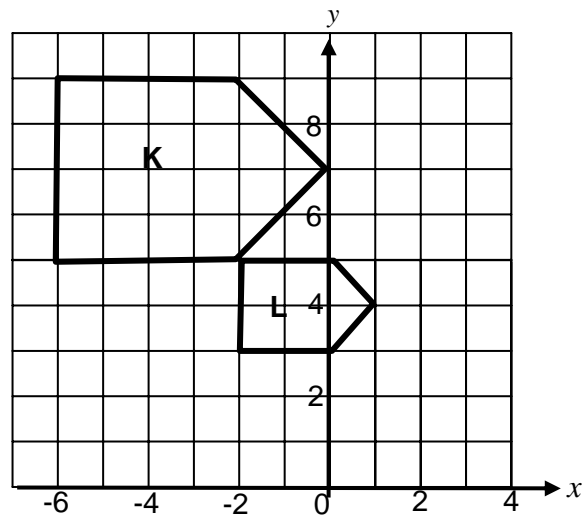


Diagram 5

Which of the following is the correct transformation?

- A A translation  $\begin{pmatrix} -1 \\ 3 \end{pmatrix}$                       C An anticlockwise rotation of  $90^\circ$  about the centre  $(-2, 5)$
- B A reflection in the line  $y = 5$                       D An enlargement at centre  $(2, 1)$  with scale factor 2
- 12 Diagram 6 shows a right angled triangle JKL. KLM is a straight line. Given that  $\cos x^\circ = \frac{3}{5}$

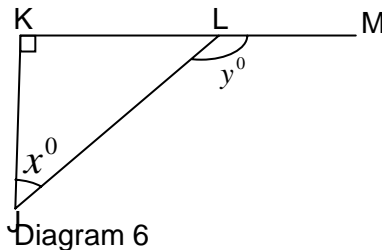


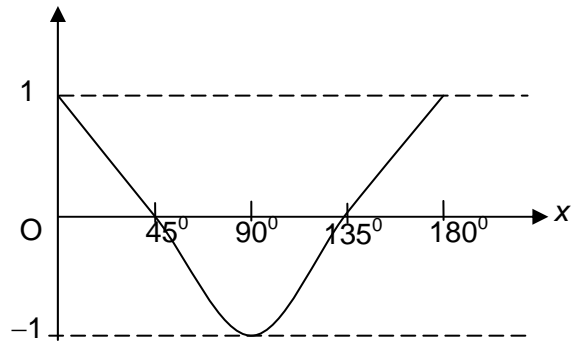
Diagram 6

Find the value of  $\tan y^\circ$ .

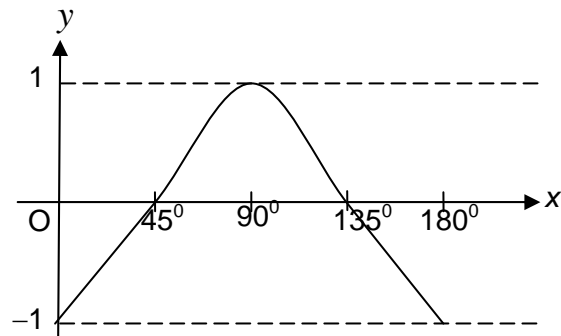
- A  $\frac{4}{5}$                                               C  $\frac{3}{4}$
- B  $-\frac{4}{5}$                                               D  $-\frac{3}{4}$
- 13 Which of the following graphs represent  $y = \cos 2x$

y

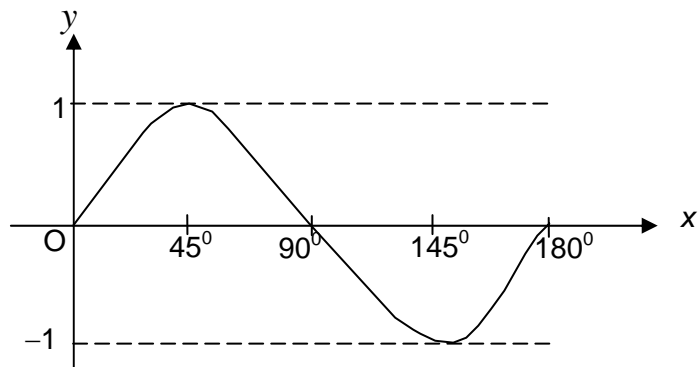
A



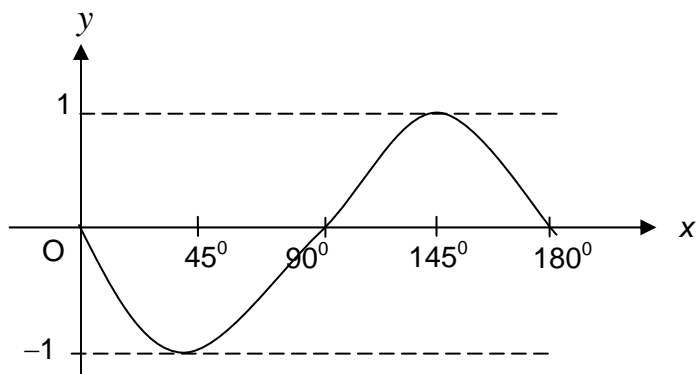
B



C



D



14 Diagram 7 shows a right prism with the horizontal base PQRS.

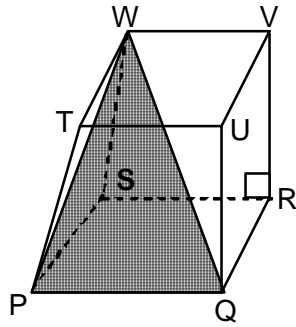


Diagram 7

What is the angle between the plane WPQ and the plane TPQU?

- |   |     |   |     |
|---|-----|---|-----|
| A | TPS | C | WQU |
| B | TQU | D | WPU |

15 Diagram 8 shows the vertical side view of a chair on a horizontal floor.

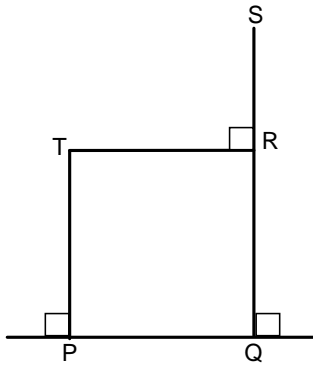


Diagram 8

Name the angle of elevation of point S from point T.

- |   |              |   |              |
|---|--------------|---|--------------|
| A | $\angle RTS$ | C | $\angle QTS$ |
| B | $\angle RST$ | D | $\angle QPS$ |

16 Diagram 9 shows two vertical flagpoles, JK and LM, on a horizontal plane. The angle of depression of vertex J from vertex L is  $27^\circ$ .

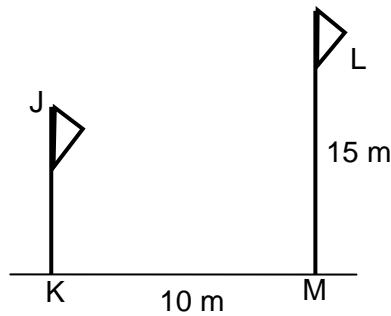


Diagram 9

Calculate the angle of elevation of the vertex J from the foot M.

- |   |                |   |                |
|---|----------------|---|----------------|
| A | $51^\circ 50'$ | C | $44^\circ 42'$ |
| B | $50^\circ 43'$ | D | $27^\circ 25'$ |

17 In diagram 10, the bearing of Q from R is  $025^\circ$ . The bearing of P from Q is

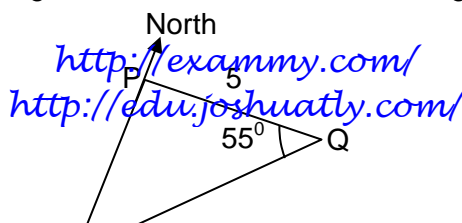


Diagram 10

- |   |               |   |               |
|---|---------------|---|---------------|
| A | $080^{\circ}$ | C | $205^{\circ}$ |
| B | $100^{\circ}$ | D | $260^{\circ}$ |

- 18 In diagram 11, N is the North Pole, S is the South Pole and NOS is the axis of the earth.

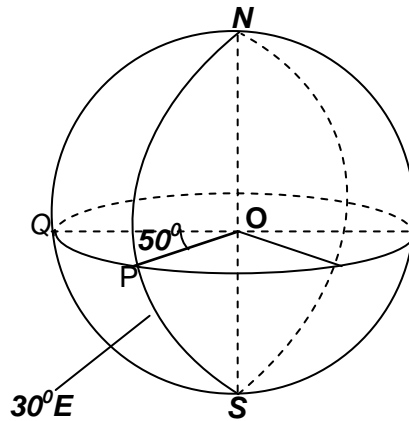


Diagram 11

Find the longitude of Q.

- |   |                      |   |                      |
|---|----------------------|---|----------------------|
| A | $20^{\circ}\text{E}$ | C | $80^{\circ}\text{E}$ |
| B | $20^{\circ}\text{W}$ | D | $80^{\circ}\text{W}$ |
- 19  $4(x-3)(2x+5)$
- |   |                 |   |                  |
|---|-----------------|---|------------------|
| A | $2x^2 - x - 15$ | C | $8x^2 + 4x - 60$ |
| B | $4x^2 - x - 15$ | D | $8x^2 - 4x - 60$ |

- 20 Express  $\frac{6}{x-3} - \frac{18}{x(x-3)}$  as a single fraction in its simplest form.

- |   |                |   |                 |
|---|----------------|---|-----------------|
| A | $\frac{6}{x}$  | C | $\frac{x-1}{x}$ |
| B | $\frac{12}{x}$ | D | $\frac{x+1}{x}$ |

- 21 Given that  $p + \frac{k}{m} = \frac{p}{m}$ , express  $p$  in terms of  $k$  and  $m$ .

- |   |                 |   |                 |
|---|-----------------|---|-----------------|
| A | $\frac{k}{1-m}$ | C | $\frac{m+1}{k}$ |
| B | $\frac{k}{1+m}$ | D | $\frac{m-1}{k}$ |

- 22 Given that  $\frac{p+5}{2} - (1-p) = 9$ , calculate the value of  $p$ .
- A 6  
B 5  
C -5  
D -15

- 23 Given that  $2^{-3} \times 64 = 2^n$ , find the value of  $n$ .
- A -9  
B 2  
C 3  
D 6

- 24 Simplify  $\frac{8p^2q}{(2pq^{1/2})^4}$
- A  $\frac{p^2q}{8}$   
B  $\frac{1}{2p^2q}$   
C  $\frac{p^2q}{2}$   
D  $\frac{4}{p^2q}$

- 25 List all the integers  $m$  which satisfy both the inequalities  $2m+1 \geq -1$  and  $5-2m \geq 0$
- A 0,1,2  
B 0,1,2,3  
C -1,0,1,2  
D -1,0,1,2,3

- 26 Table 1 shows the distributions of the scores of a group of pupils in a quiz.

Score	1	2	3	4	5	6
Frequency	2	5	3	2	6	2

Table 1

Find the median of the scores.

- A 3  
B 3.5  
C 4  
D 4.5
- 27 Table 2 shows the number of shirts for each size sold by a trader.

Size	Small	Medium	Large
Number of shirts	25	23	$x$

Table 2

If the information is represented in a pie chart, the angle for the sector representing the large size is  $144^\circ$ . Find the value of  $x$ .

- A 25  
B 32  
C 48  
D 72
- 28 Given  $\xi = \{x : x \text{ integers from 1 to 10}\}$   
 $A = \{x : x \text{ is prime number}\}$   
 $B = \{x : x \text{ is perfect square number}\}$   
 List all elements of set  $(A \cup B)'$ .
- A {2,3,4,5,7}  
B {2,3,5,7}  
C {1,6,8,10}  
D {1,2,4,6,8,10}
- 29 Diagram 12 shows the graph of  $y = ax^n + c$

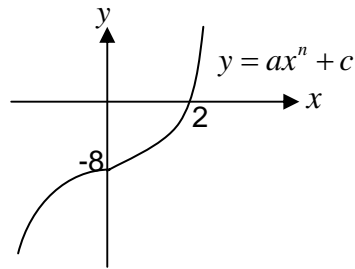


Diagram 12

Find the values of  $a, n$  and  $c$

A  $a = 2, n = 3, c = -8$

C  $a = -1, n = 3, c = -8$

B  $a = -2, n = 3, c = 8$

D  $a = 1, n = 3, c = -8$

- 30 Diagram 13 is a Venn Diagram that shows the elements of set  $P$ , set  $Q$  and set  $R$ . Given that the universal set,  $\xi = P \cup Q \cup R$  and  $n(P') = n(Q \cap R)$ .

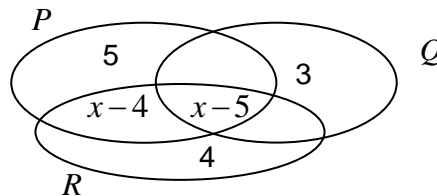


Diagram 13

Find the value of  $x$ .

A 5

C 10

B 8

D 12

- 31 Diagram 14 shows the sets  $J, K$  and  $M$  such that the universal set,  $\xi = J \cup K \cup M$ .

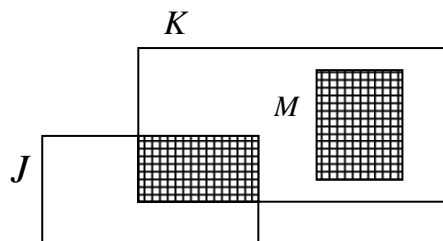


Diagram 14

The shaded region represents the set

A  $(J \cup K) \cap M$

C  $(J \cup K') \cup M$

B  $(J \cap K) \cup M$

D  $(M' \cup J) \cap K$

- 32 Find the  $y$ -intercept of the straight line  $3x - 4y - 18 = 0$

A 6

C  $\frac{9}{2}$

B -6

D  $-\frac{9}{2}$

- 33 A box contains 3 red balls, 7 blue balls and a number of yellow balls. A ball is chosen





GERAK GEMPUR – SET 3

- 1 Round off 70246 to three significant figure.  
 A 70200 C 70240  
 B 70300 D 70250
- 2 Express 0.00000202 in standard form.  
 A  $2.02 \times 10^4$  C  $2.02 \times 10^6$   
 B  $2.02 \times 10^{-5}$  D  $2.02 \times 10^{-6}$
- 3  $2.5 \times 10^{-5} - 0.0000035$   
 A  $2.15 \times 10^{-6}$  C  $1.0 \times 10^{-6}$   
 B  $2.15 \times 10^{-5}$  D  $1.0 \times 10^{-5}$
- 4 Diagram 1 shows an empty tank which is a cylinder, with length 1400 cm, diameter is 50 cm. A worker fill up 50 % of the tank with water.

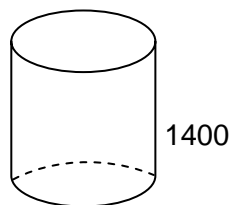


Diagram 1

Calculate the volume, in  $\text{cm}^3$ , of water in the tank. (Use  $\pi = \frac{22}{7}$ )

- A  $2.75 \times 10^{-6}$  C  $1.375 \times 10^6$   
 B  $2.75 \times 10^6$  D  $1.375 \times 10^{-6}$
- 5 What is the value of the digit 2 in base ten, in the number  $5204_8$ ?  
 A 128 C 320  
 B 200 D 1024
- 6 Express  $110101_2$  as a number in base eight.  
 A  $67_8$  C  $47_8$   
 B  $65_8$  D  $45_8$
- 7 In diagram 2, ABCDE is a regular pentagon, ABF and CGH are straight line.

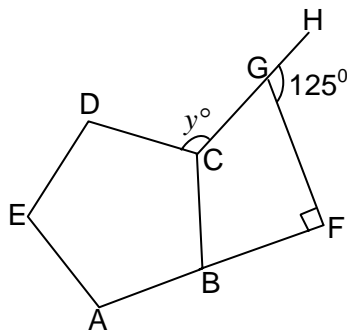


Diagram 2

Find the value of  $y$ .

- A 72 C 97  
 B 85 D 109





- 14 Diagram 7 shows a right prism with a horizontal rectangular base ABCD.

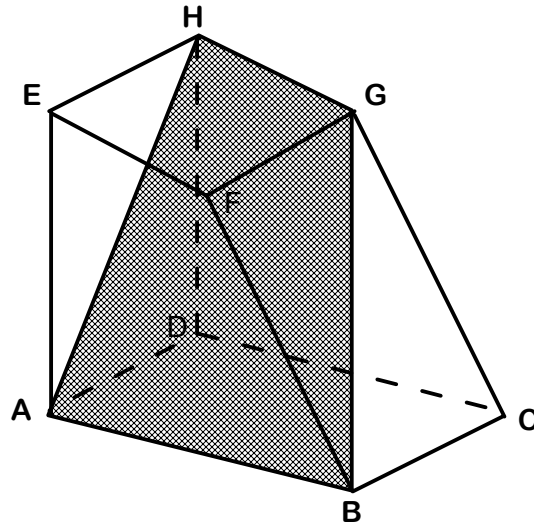


Diagram 7

What is the angle between the plane AHGB and the plane ABFE?

- |   |     |   |     |
|---|-----|---|-----|
| A | HAD | C | GBF |
| B | HAE | D | GBC |
- 15 In diagram 8, PQ is a vertical flag pole. QR is horizontal

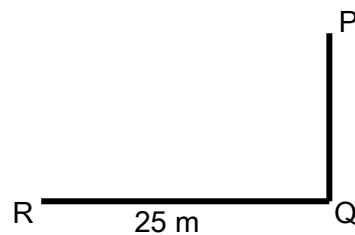


Diagram 8

The angle of depression of R from P is  $37^\circ$ . The height, in m, of the flag pole is

- |   |       |   |       |
|---|-------|---|-------|
| A | 15.05 | C | 19.97 |
| B | 18.84 | D | 33.18 |
16. Diagram 9 shows the position of points J, K and M on a horizontal ground.

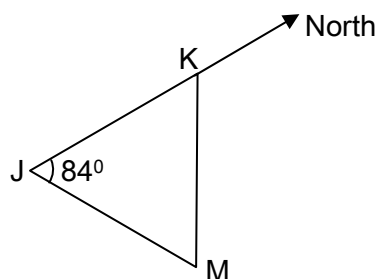


Diagram 9

Find the bearing of J from M.

- |   |             |   |             |
|---|-------------|---|-------------|
| A | $084^\circ$ | C | $264^\circ$ |
| B | $096^\circ$ | D | $276^\circ$ |

- 17 In diagram 10, N is North Pole, S is the South Pole and NOS is the axis of the earth.

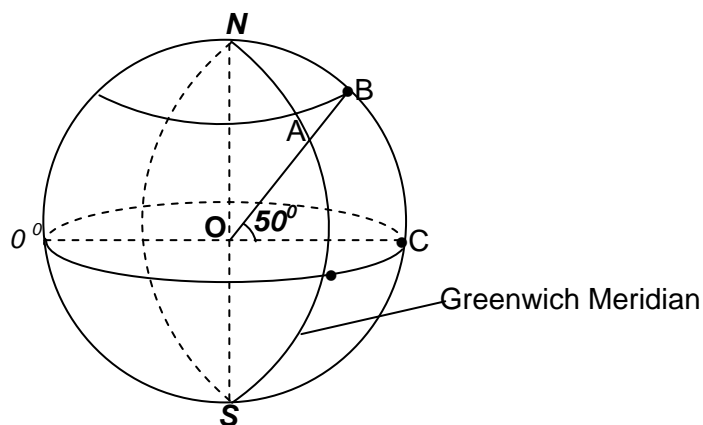


Diagram 10

Considering the four points **A**, **B**, **C** and **D**, which of these is  $(50^\circ \text{ N}, 0^\circ \text{ E})$  ?

18  $(2k - 5)(3k + 4) =$

A  $6k^2 - 23k + 20$

C  $6k^2 - 7k + 20$

B  $6k^2 - 23k - 20$

D  $6k^2 - 7k - 20$

19 Given that  $\frac{1}{4}q + 1 = 6$ , then  $q =$

A 5

C 24

B 20

D 28

20 Express  $\frac{1}{2m} - \frac{m+2}{6m^2}$  as a single fraction in its simplest form.

A  $\frac{2m+1}{3m^2}$

C  $\frac{m-1}{3m^2}$

B  $\frac{2m-1}{3m^2}$

D  $\frac{m+1}{3m^2}$

21 Given that  $u = 5\left(\sqrt{\frac{1}{v+w}}\right)$ , express  $v$  in terms of  $u$  and  $w$ .

A  $\frac{25}{u^2} - w$

C  $\frac{25}{u^2} - u^2w$

B  $\frac{5}{u^2} - w$

D  $\frac{5}{u^2} - u^2w$

- 22 Given that  $\frac{k+5}{2} - (1-k) = 9$ , calculate the value of  $k$ .
- A -15  
B -5  
C 6  
D 5

- 23 Calculate the value of  $\frac{(8^{\frac{1}{3}})^2 \times 4^{\frac{3}{2}}}{6}$
- A  $\frac{16}{9}$   
B  $\frac{16}{3}$   
C  $\frac{8}{3}$   
D  $\frac{4}{3}$

- 24 Simplify  $\frac{(9p^4q^{-2})^{\frac{1}{2}}}{2pq^3}$
- A  $\frac{9p^2}{2q^4}$   
B  $\frac{9p^3}{2q^5}$   
C  $\frac{3p}{2q^4}$   
D  $\frac{3}{2pq^4}$

- 25 List all the integers  $x$  which satisfy the inequalities  $4 \leq 3x - 11 < 17$ .
- A 5,6,7  
B 6,7,8,9  
C 5,6,7,8  
D 5,6,7,8,9

- 26 The combined bar chart shows the total number of male and female students in three clubs. Given that 21 male students in Mathematics Club.

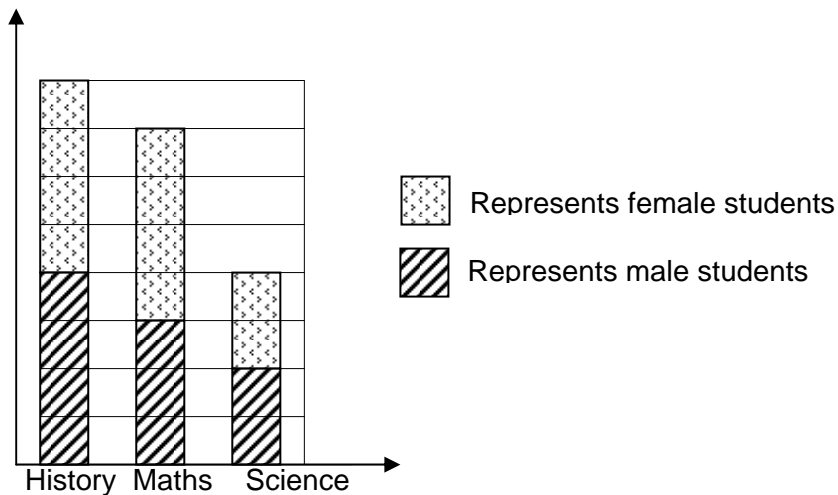


Diagram 11

Find the percentage of female students in History Club from the total number of female students.

- A 52.6 %  
B 44.4 %  
C 40 %  
D 21 %
- 27 The pie chart below shows the amount of money Raju spends on each day with a total sum spend amount to RM 180.00

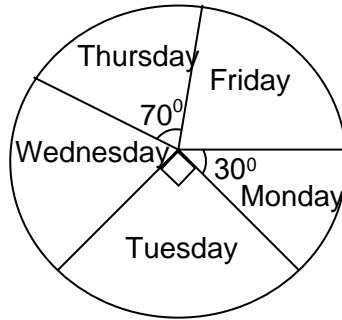


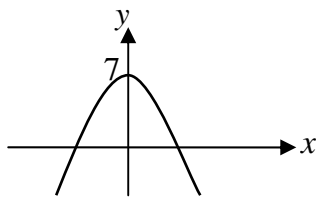
Diagram 12

Find the amount of money he spends on Wednesday and Friday.

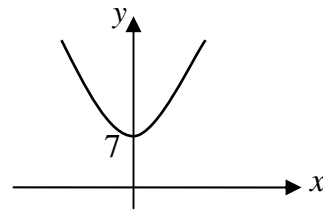
- |   |          |   |           |
|---|----------|---|-----------|
| A | RM 80.00 | C | RM 95.00  |
| B | RM 85.00 | D | RM 100.00 |

28 Which of the following graph represents  $y = 7 - 2x^2$

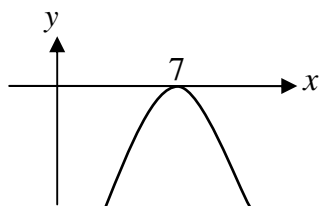
A



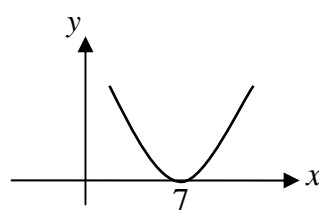
C



B



D



29 Diagram 13 is a Venn diagram showing the elements of the set  $P, Q$  and  $R$ . Given  $\xi = P \cup Q \cup R$

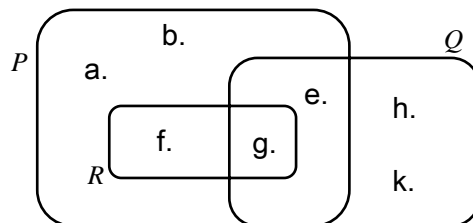
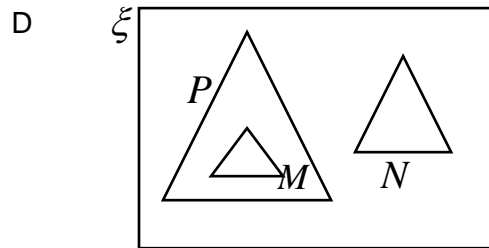
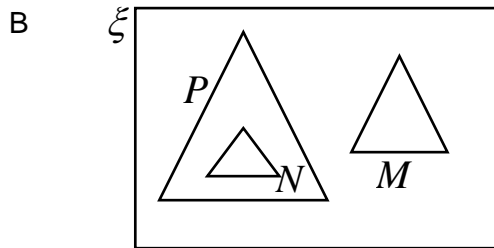
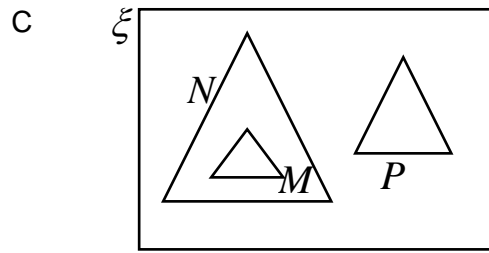
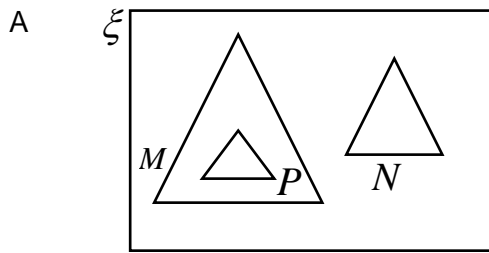


Diagram 13

List all the of set  $(Q \cup R)' \cap P$ .

- |   |              |   |        |
|---|--------------|---|--------|
| A | {a, b, f}    | C | {a, e} |
| B | {a, b, f, g} | D | {a, b} |

30 Given that the universal set  $\xi = M \cup N \cup P$ ,  $M \subset N$  and  $N \cap P = \emptyset$ . The Venn diagram that represents these relationships is



31 The Venn diagram shows the number of elements in set  $P, Q$  and  $R$ .

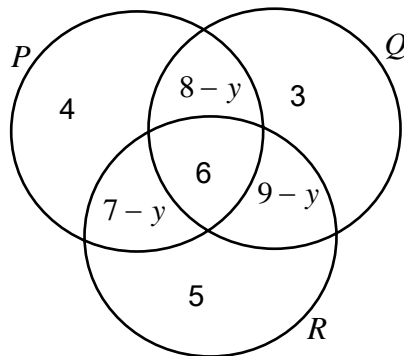


Diagram 14

Given that universal set,  $\xi = P \cup Q \cup R$  and  $n(P \cup R) = 33$ . Calculate the value of  $y$ .

- |   |    |   |    |
|---|----|---|----|
| A | 2  | C | 3  |
| B | -2 | D | -3 |

32 In diagram 15, JK is a straight line with gradient  $-\frac{3}{5}$

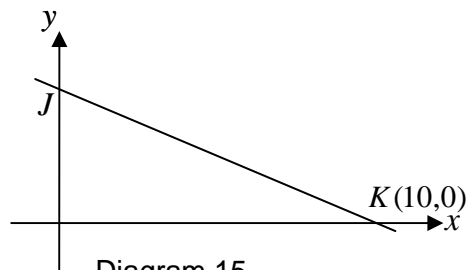


Diagram 15

Find the y-intercept of the straight line JK.

- |   |    |   |   |
|---|----|---|---|
| A | 16 | C | 6 |
| B | 14 | D | 5 |

33 The coordinates of point K are  $(-3, 3)$  and the gradient of the straight line KJ is  $\frac{1}{2}$ .



A  $P \propto R^3 \sqrt{Q}$

C  $P \propto \frac{\sqrt{Q}}{R^3}$

B  $P \propto \frac{R^3}{Q^2}$

D  $P \propto \frac{R^3}{\sqrt{Q}}$

39  $5 \begin{pmatrix} -1 & 3 \\ 4 & -2 \end{pmatrix} - \begin{pmatrix} -2 & 6 \\ 5 & 3 \end{pmatrix} =$

A  $\begin{pmatrix} -3 & 9 \\ 15 & -13 \end{pmatrix}$

C  $\begin{pmatrix} -3 & -11 \\ -1 & -5 \end{pmatrix}$

B  $\begin{pmatrix} -7 & 9 \\ 15 & -7 \end{pmatrix}$

D  $\begin{pmatrix} 1 & -3 \\ 15 & -7 \end{pmatrix}$

40 Given  $(m \ 5) \begin{pmatrix} 2 & 0 \\ -m & 1 \end{pmatrix} = (18 \ 5)$ , calculate the value of  $m$ .

A 13  
B 9

C -1  
D -6

## ANSWER SCHEME

QUESTION NO	SET 1	SET 2	SET 3
1	A	C	A
2	D	B	D
3	C	A	B
4	D	C	C
5	C	B	A
6	B	C	B
7	B	B	D
8	A	A	D
9	D	C	C
10	A	A	A
11	B	D	D
12	A	D	B
13	C	A	D
14	B	C	B
15	D	A	B
16	B	C	C
17	D	D	A
18	D	B	D
19	B	D	B
20	C	A	C
21	B	A	A
22	C	B	D
23	D	C	B
24	A	B	C
25	B	C	D
26	D	B	C
27	C	B	B
28	B	C	A
29	A	D	D
30	C	D	C
31	B	B	A
32	B	D	C
33	D	A	C
34	C	A	B
35	A	C	C
36	A	D	B
37	C	A	C
38	C	A	D
39	A	C	A
40	D	D	D