

REVISION 14

Section C

3. a) Syasya bought a cubical shaped accessories box. She found out that the total surface area of the box is $24x^2 \text{ cm}^2$.

Find the volume, in cm^3 , of the box.

Syasya membeli kotak perhiasan berbentuk kubus. Dia mendapati bahawa jumlah luas permukaan kotak itu ialah $24x^2 \text{ cm}^2$.

Cari isipadu, dalam cm^3 , kotak tersebut.

Answer/ Jawapan:

[3marks/ markah]

Area of one of cubical surface = _____ =

Area of one cubical side = $\sqrt{\quad}$ =

Volume of cubical shape = _____ x _____ x _____ =

3.b) Diagram 13 shows two cylinders P and Q

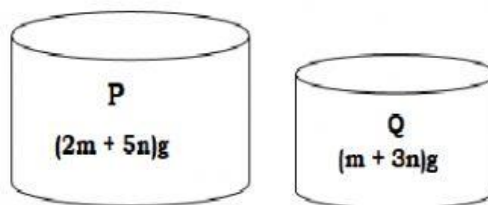


Diagram 13

Calculate the total mass of the 3 cylinder P and 5 cylinder Q, in g.

[2 marks]

Answer:

= (_____) + (_____)

= (_____) g

4.a) In Diagram 15, shows two parallel lines, OP and QR. Straight line PR is parallel to the y-axis and O is the origin

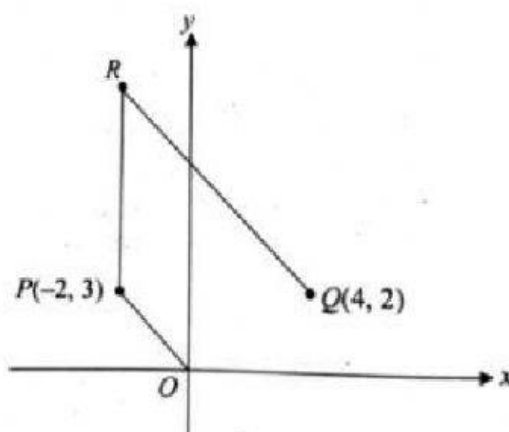


Diagram 15

Find

- i) Given, the midpoint of PR is $(-2, 6)$. Find the coordinate of point R
- ii) The equation of the straight line QR

[4 marks]

Answer:

i)

value at x-axis is $x =$

value at y-axis

$=$ _____

$y =$

point R = (,)

$$\text{ii) } \sqrt{(\quad - \quad)^2 + (\quad - \quad)^2}$$

$=$

4.b) Diagram 17 shows a square ABCD with three similar circles. The three similar circles are cut out from the square ABCD.

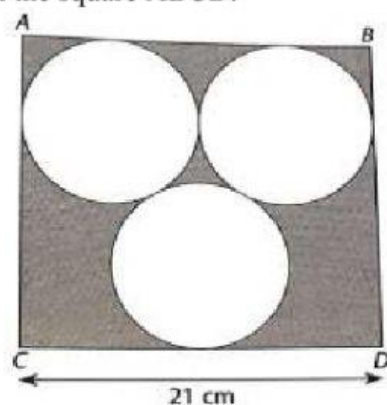


Diagram 17

Find the area, in cm^2 , of the remaining region. [Use $\pi = \frac{22}{7}$]

Answer : [3 marks]

Area of square = $\quad \times \quad =$

Area of circle = $\quad \times \left(\frac{\quad}{\quad} \times \quad \right) =$

Area of the shaded region = $\quad =$

5.a) Diagram 18 shows a scale drawing of recreation area which consists of a square, an isosceles triangle and a semicircle. The shaded region developed into a playground for the children. Find the area of recreation area which does not include the playground.

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

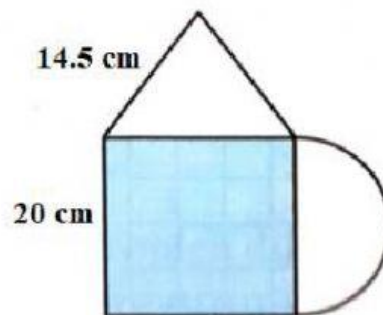


Diagram 18

[4 marks]

Answer:

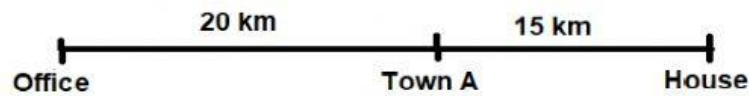
Height of triangle = $\sqrt{\quad} =$

Area of triangle = $\quad \times \quad \times \quad =$

Area of semicircle = $\quad \times \quad \times \quad =$

Area of the recreation = $\quad =$

5.b) Jonathan drives from his office 1540 and reaches Town A at 1600. Then he drives at a speed of 90 km/h to return home.



Calculate:

- i) the time he reaches home
- ii) the average speed of the journey.

[3 marks]

Answer:

- i) time reach home =
(in 24 hour time)

- ii) average speed = _____ = km/h

6. a) Mr. Kamal bought 10 boxes of oranges for RM24 per box. There are 56 oranges in each box. He found out that for every 40 oranges, there is one bad orange.

- i) What is probability of getting a bad orange?
- ii) How many oranges are expected to be bad?

[3 marks]

Answers:

- i) probability getting bad orange

= _____

- ii) expected bad orange

= _____ x _____ x _____ =

6.b) Factorise:

$$12t^2 + 16t$$

[1 marks]

Answer:

= ()