

**Bahagian C/ Section C**  
 [60 markah / marks]  
 Jawab **semua** soalan / Answer **all** question

1. (a) Data berikut ialah suhu yang dicatat untuk 5 hari.  
*The following data are the temperatures recorded for 5 days.*

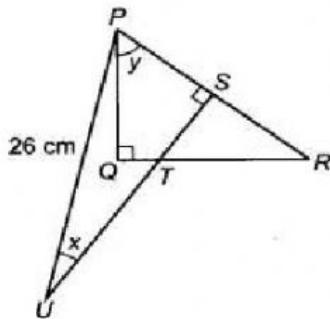
25°C, 27°C, 34°C, 28°C, 29°C

Hitungkan min. / Calculate the min. [2 markah / marks]

Jawapan / Answer:

$$\begin{array}{r} + \\ + \\ + \\ + \\ \hline \end{array} =$$

- (b) Dalam Rajah 1(b),  $PSR$  dan  $STU$  ialah garis lurus dan  $QR = 16$  cm. Diberi  $PS = SR$  dan  $\cos x = \frac{12}{13}$ . Hitung  
*In Diagram 1(b),  $PSR$  and  $STU$  are straight lines and  $QR= 16$  cm. Given  $PS=SR$  and  $\cos x = \frac{12}{13}$ . Calculate*



Rajah 1(b)/ Diagram 1(b)

- (i) panjang, dalam cm,  $PS$   
*the length, in cm , of  $PS$*  [2 markah/ marks]

Jawapan/ Answer :

$$PS = \sqrt{\boxed{\phantom{00}}^2 + \boxed{\phantom{00}}^2} = \boxed{\phantom{00}}$$

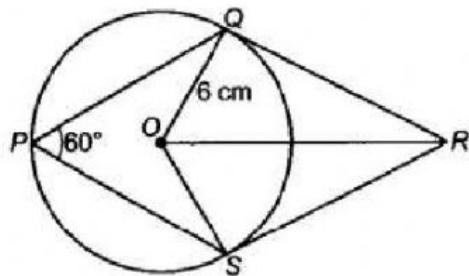
(ii)  $\tan y$  [2 markah/ marks]

Jawapan/ Answer :

$$\tan y = \frac{\text{_____}}{\text{_____}} = \text{_____}$$

- (c) Rajah 1(c) menunjukkan sebuah bulatan berpusat di O dan berjejari 6 cm. Diberi QR dan SR adalah tangen kepada bulatan itu dan  $\angle QPS = 60^\circ$ .

Diagram 1(c) shows a circle with centre O and radius 6 cm. Given QR and SR are tangents to the circle and  $\angle QPS = 60^\circ$ .



Rajah 1(c) / Diagram 1(c)

- (i) Hitung panjang, dalam cm , RS / Calculate the length , in cm , RS [2 markah/ marks]

Jawapan/ Answer :

$$\tan 60^\circ = \frac{\text{_____}}{\text{_____}}$$

$$RS = \frac{\text{_____}}{\text{_____}} \times \text{_____}$$

$$RS = \text{_____}$$

- (ii) Luas  $\Delta ORS$  dalam  $\text{cm}^2$ / Area of  $\Delta ORS$  in  $\text{cm}^2$  [2 markah/ marks]

Jawapan/ Answer :

$$\frac{\text{_____}}{\text{_____}} \times \frac{\text{_____}}{\text{_____}} = \text{_____}$$

2. (a) Pakcik Zamri menjual 2 saiz ( kecil dan besar ) bagi 3 jenis jus buah nenas, limau dan tembikai di warungnya. Nyatakan

*Pakcik Zamri sells 2 size ( small and large) of three types of fruit juices which is pineapple(P), lemon(L) and watermelon(W) at his stall. State*

- (i) ruang sampel bagi jus buah-buahan yang dijual.

*the sample space of fruit juice sold.  
use capital letter for big size fruit and small letter for small size fruit)* [2 markah / marks]

Jawapan/ Answer :

$$\{ \quad , \quad , \quad , \quad , \quad , \quad , \quad \}$$

- (ii) Bilangan unsur dalam ruang sampel

*Number of elements in the sample space.* [1 markah/ marks]

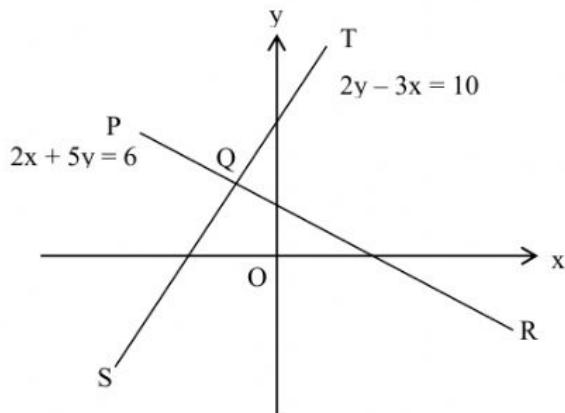
Jawapan/ Answer:

$$n =$$

- (b) Dalam Rajah 2(b),  $PQR$  dan  $SQT$  ialah garis lurus. Cari koordinat titik  $Q$ .

*In Diagram 2(b),  $PQR$  and  $SQT$  are straight lines. Find the coordinates of point  $Q$ .*

[4 markah/ marks]



Rajah 2(b)/ Diagram 2(b)

Jawapan/ Answer :

..... eqn 1

.....eqn 2

$$\text{eqn.1} \times 5 \quad \dots\dots\dots\dots\dots \text{eqn 3}$$

$$\text{eqn. 2} \times 2 \quad \dots\dots\dots\dots\dots \text{eqn 4}$$

=

$x =$

substitute  $x =$  in eqn.

$$( \quad ) =$$

$$y = \text{coordinate is } ( \quad , \quad )$$

- (c) Cari nilai yang berikut.  
*Find the value of.*

[ 3 markah / marks ]

$$\sqrt[3]{-3\frac{3}{8}} \times (\sqrt{36} - 2^3)^2$$

Jawapan/ Answer :

$$\underline{\quad} \times (\quad )^2$$

$$= \underline{\quad} \times (\quad )^2$$

=

- 3(a) Tentukan sama ada setiap pasangan nisbah yang berikut adalah setara atau tidak.  
*Determine whether each of the following pair of ratios are equivalent.*

- (i)  $21 : 14 : 28$  dan/ and  $3 : 1 : 4$

(ii)  $3\frac{1}{8} : 2\frac{1}{4}$  dan / and  $25 : 18$   
Jawapan/ Answer :

[2 markah / marks]

(i)

(ii)

(b) (i) Permudahkan ungkapan yang berikut.

Simplify the following expression.

[2 markah/ marks]

$$(p + 2)^2 - 9$$

Jawapan/ Answer:

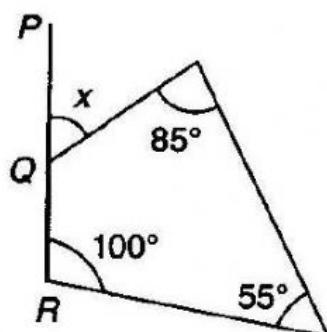
$$= \quad 2$$

$$= \quad 2$$

(b) (ii) Dalam Rajah 3(b) ,  $PQR$  ialah garis lurus. Cari nilai  $x$ .

In Diagram 3(b) ,  $PQR$  is a straight line. Find the value of  $x$ .

[2 markah/ marks]



Rajah 3(b) / Diagram 3(b)

Jawapan /Answer :

$$= \quad =$$

$$x = \underline{\hspace{2cm}} =$$

3.

c) Given that / diberi  $\xi = \{x : 1 \leq x \leq 10, x \text{ is an integer} / \text{ialah integer}\}$ ,

$Q = \{x : x \text{ is a perfect square} / \text{kuasa dua sempurna}\}$

$R = \{x : x \text{ is factors of } 30\}$

Find / cari :

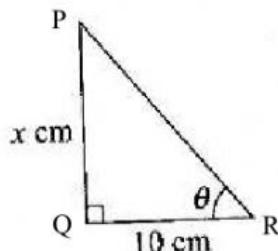
(i)  $Q = \{\underline{\hspace{2cm}}, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}\}$

(ii)  $n(R) =$

[2 marks / markah]

(c) Rajah 3(c) menunjukkan sebuah segi tiga bersudut tegak PQR.

Diagram 3(c) shows a right-angled triangle.



Diberi QR = 10 cm Dan  $\tan \theta = \frac{6}{5}$ . Cari nilai x.

Given QR = 10 cm and  $\tan \theta = \frac{6}{5}$ . Find the value of x.

[2 markah/ marks]

Jawapan/ Answer:

$$x = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} =$$

4. (a) Lengkapkan nombor-nombor berikut yang merupakan sebahagian daripada Nombor Fibonacci.

*Complete the numbers below that is the part of Fibonacci Numbers.*

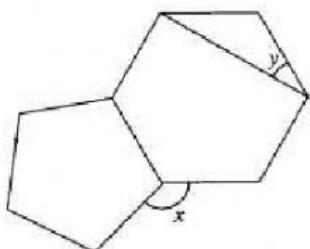
[3 markah/ marks]

Jawapan / Answer :

0, 1, \_\_\_\_\_, 2, 3, \_\_\_\_\_, 8, \_\_\_\_\_

- (b) Rajah 4(b) menunjukkan gabungan dua buah poligon sekata.

*Diagram 4(b) shows a combination of two regular polygons.*



Rajah 4(b)/ Diagram 4(b)

Cari nilai  $x$  dan  $y$ .

*Find the value of  $x$  and  $y$ .*

[4 markah/ marks]

$$x =$$

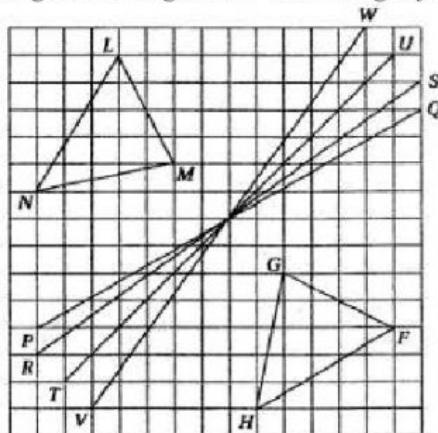
$$=$$

$$y = \left( \frac{\quad - \quad}{2} \right)$$

$$y =$$

- 5 (a) Rajah 5(a) menunjukkan dua buah segi tiga, LMN dan FGH serta empat garis lurus, VW, TU, RS dan PQ, dilukis pada grid segi empat sama. Segi tiga LMN adalah imej bagi segi tiga FGH di bawah suatu pantulan.

*Diagram 5(a) shows two triangles, LMN and FGH, and four straight lines, VW, TU, RS and PQ, drawn on square grids. Triangle LMN is the image of triangle FGH under a reflection.*



Rajah 5(a)/ Diagram 5(a)

Nyatakan paksi pantulan itu.  
*State the axis of reflection.*

[2 markah/ marks]

Jawapan/ Answer :

- (b) Hitung nilai bagi / Calculate the value of

$$\frac{\sqrt{7^{-4} \times 11^4}}{49 \times 121}$$

[4 markah/ marks]

Jawapan/ Answer :

$$= \frac{(\quad \times \quad)}{\times} \underline{\quad}$$

$$= \underline{\quad} \times \underline{\quad}$$

$$= \underline{\quad}$$

(c)

- (ii) Calculate the value of  $x$  and of  $y$  that satisfy the following simultaneous equation:  
*Hitung nilai x dan nilai y yang memuaskan persamaan linear serentak berikut:*

$$\begin{aligned}2x - y &= 3 \\2x + 3y &= 23\end{aligned}$$

[4 marks/*markah*]

**Answer/ Jawapan:**

.....eqn.1

substitute        =        in eqn.

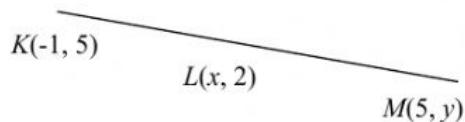
.....eqn.2

( ) =

2

—

6 (a) Dalam Rajah 6(a), L ialah titik tengah bagi  $KM$ .  
*In Diagram 6(a), L is the midpoint of KM.*



### Rajah 6(a)/ Diagram 6(a)

Cari nilai  $x$  dan  $y$ .

*Find the values of  $x$  and  $y$ .*

[3 markah/marks]

#### **Jawapan / Answer:**

$$x = \dots =$$

=

$$y =$$

14