

FORM 3 REVISION 11.2 - Section C (60 marks)
Bahagian C (60 markah)

Instruction : Answer all questions in the space provided. Show your calculation.

Arahan : Jawab semua soalan pada ruangan yang disediakan. Tunjukkan jalan pengiraan anda.

17. a) Table below shows the favourite colours of a group of students.

Jadual di bawah menunjukkan warna pilihan sekumpulan pelajar.

Favourite colour Warna pilihan	Number of students Bilangan murid
Blue / Biru	8
Purple / Ungu	3
Green / Hijau	5
Red / Merah	x

Cikgu Hidayah selects a student at random from the group. The probability that she selects a student who likes the red colour is $\frac{1}{5}$. Find the value of x .

Cikgu Hidayah memilih seorang murid daripada kumpulan itu secara rawak. Kebarangkalian seorang murid yang gemar warna merah dipilih ialah $\frac{1}{5}$. Cari nilai x .

Answers/Jawapan :

$$\frac{\text{Number of students who like red}}{\text{Total number of students}} = \frac{1}{5}$$

$$\frac{x}{8+3+5+x} = \frac{1}{5}$$

$$x = 2$$

(3 marks/markah)

- b) A car that travels along a straight road will pass through three traffic lights. The first, second and third traffic lights will turn green every 3 minutes, 2 minutes and 4 minutes respectively. What is the time interval for all the three traffic lights to turn green simultaneously?

Sebuah kereta yang bergerak di sepanjang suatu jalan raya yang lurus akan melalui tiga lampu isyarat. Lampu isyarat pertama, kedua dan ketiga masing-masing akan menyalakan lampu hijau setiap 3 minit, 2 minit dan 4 minit. Berapakah selang masa bagi ketiga-tiga lampu isyarat itu untuk menyalakan lampu hijau secara serentak?

Answers/Jawapan :

	,	,
	,	,
	,	,

Time for all traffic light green

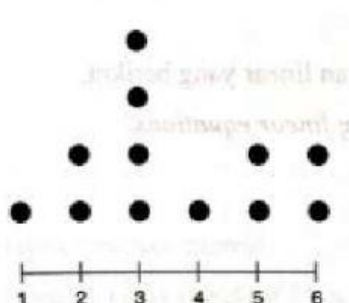
= x

= second

= minute

(4 marks/markah)

18. a) The diagrams shows a dot plot representing the outcomes of rolling a dice for twelve times.
Rajah menunjukkan satu plot titik yang mewakili kesudahan sebiji dadu yang dilontarkan sebanyak dua belas kali.



Find the mode, median and mean of the data.

Cari mod, median dan min bagi data itu.

Answers/Jawapan :

Mode =

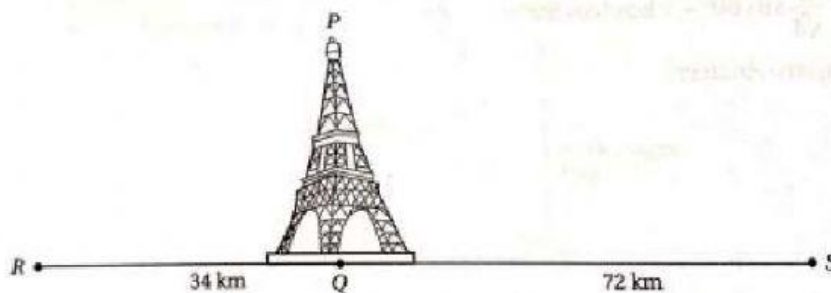
Median =

Mean = $\frac{+ + + + +}{\quad}$

=

(4 marks/markah)

- b) In Diagram, R, S and Q are three points on a horizontal plane. PQ is a tower. The angle of elevation of P from S is 65° .
Dalam Rajah, R, S dan Q ialah tiga titik pada satah mengufuk. PQ ialah sebuah menara. Sudut dongakan P dari S ialah 65° .



Calculate the angle of depression of R from P. (write the decimal in 4 significant figure)
Hitung sudut tunduk bagi R dari P.

Answers/Jawapan :

$$\tan 65 = \underline{\hspace{2cm}}$$

$$PQ = \quad \quad \quad x$$

$$= \quad \quad \quad x$$

$$=$$

θ = angle of depression R from P

$$\tan \theta = \underline{\hspace{2cm}} =$$

$$\theta =$$

- c) It is given that $\frac{5x-4}{x+m} = 3$

$$\text{Diberi bahawa } \frac{5x-4}{x+m} = 3$$

- i) Express x in terms of m
Ungkapkan x dalam sebutan m

Answers/Jawapan :

$$=$$

=

=

$x =$ _____

(2 marks/markah)

ii) Find the value of x when $m = 2$.

Cari nilai x apabila $m = 2$.

Answers/Jawapan :

$x =$ _____

$=$ _____ $=$

(1 marks/markah)

19. List all the integer values of x which satisfy the following linear inequalities.

Senaraikan semua nilai integer x yang memuaskan ketaksamaan linear di bawah.

$$-3 < 5x + 2 \leq 17$$

Answers/Jawapan :

x

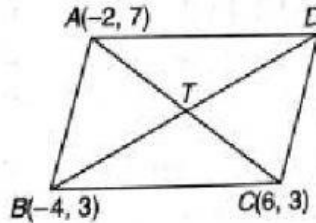
x

$$x = \quad , \quad , \quad ,$$

(3 marks/markah)

Diagram shows a parallelogram ABCD. The diagonals AC and BD intersect at point T.

Rajah menunjukkan sebuah segi empat selari ABCD. Pepenjuru-pepenjuru AC dan BD bersilang pada titik T.



Find the coordinates of point

Cari koordinat bagi titik

i) T, ii) D.

Answers/Jawapan :

T is midpoint of AC and BD

Coordinate T = $\left(\quad + \quad , \quad + \quad \right)$ = (,)	Coordinate D = $\quad + \quad =$ $x =$ $\quad + \quad =$ $y =$
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(4 marks/markah)

- c) Samad saves RM10 000 in a fixed deposit account which offered an interest rate of $r\%$ per annum and the interest is compounded every 6 months. The total interest received after one year is RM404. Find the value of r .

Samad menyimpan RM10 000 dalam akaun simpanan tetap yang menawarkan kadar faedah $r\%$ setahun dan faedah dikompaunkan 6 bulan sekali. Jumlah faedah yang diterima selepas satu tahun ialah RM404. Cari nilai r .

Answers/Jawapan :

$$= \left(\quad \right) \left(\quad + \quad \right) \left(\quad \right) \left(\quad \right)$$

$$+ \underline{\hspace{2cm}} = \sqrt{\hspace{2cm}}$$

$$r =$$

(3 marks/markah)

End of question papers.
Kertas soalan tamat.