

1. Calculate the value of $3\frac{1}{3} - \frac{2}{3} \times \frac{3}{4}$ and express the answer as a fraction in the lowest term.

Hitungkan nilai bagi $3\frac{1}{3} - \frac{2}{3} \times \frac{3}{4}$ dan ungkapkan dalam pecahan terendah.

[2 marks]
[2 markah]

Answer / Jawapan:

1

2

2. Calculate the value of $1\frac{1}{4} - (-0.2) \div 0.04$ and express the answer as a decimal.

Hitungkan nilai bagi $1\frac{1}{4} - (-0.2) \div 0.04$ dan ungkapkan jawapan dalam perpuluhan.

[2 marks]
[2 markah]

Answer / Jawapan:

2

2

3. (a) Find the value of $\sqrt[3]{-\frac{27}{125}}$.

Cari nilai bagi $\sqrt[3]{-\frac{27}{125}}$.

- (b) Calculate the value of $\sqrt{0.49} - (-2)^3$.

Hitungkan nilai bagi $\sqrt{0.49} - (-2)^3$.

[3 marks]
[3 markah]

Answer / Jawapan:

(a)

(b)

3

3

4. In Diagram 4, KLM is a straight line. Calculate the value of $\tan x^\circ$.
 Dalam rajah 4, KLM ialah garis lurus. Hitungkan nilai bagi $\tan x^\circ$.

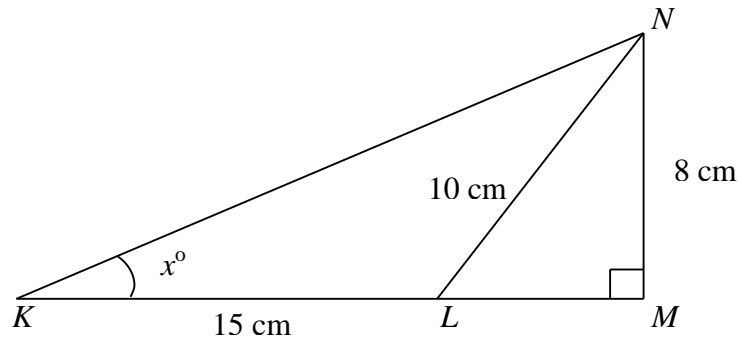
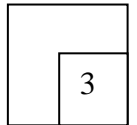


Diagram 4
 Diagram 4

[3 marks]
 [3 markah]

Answer / Jawapan:

4

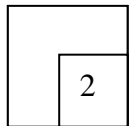


5. Simplify $(4x-1)^2 - (9x+5)$.
 Permudahkan $(4x-1)^2 - (9x+5)$.

[2 marks]
 [2 markah]

Answer / Jawapan:

5



6. Factorise completely each of the following expressions:
 Faktorkan selengkapnya tiap-tiap ungkapan berikut :

- (a) $4b^2 - 28bc$
 (b) $6 - 24y^2$

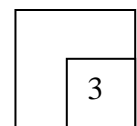
[3 marks]
 [3 markah]

Answer / Jawapan:

(a)

(b)

6



7. Diagram 7 in the answer space is drawn on a square grid of sides 1 unit. On the diagram, draw and label $A'B'C'$, the image of triangle ABC under translation of $\begin{pmatrix} 4 \\ -6 \end{pmatrix}$.

Rajah 7 di ruang jawapan dilukis pada grid segi empat dengan sisi 1 unit. Pada rajah, lukis dan labelkan $A'B'C'$, imej bagi segitiga ABC di bawah translasi $\begin{pmatrix} 4 \\ -6 \end{pmatrix}$.

[2 marks]
[2 markah]

Answer / Jawapan:

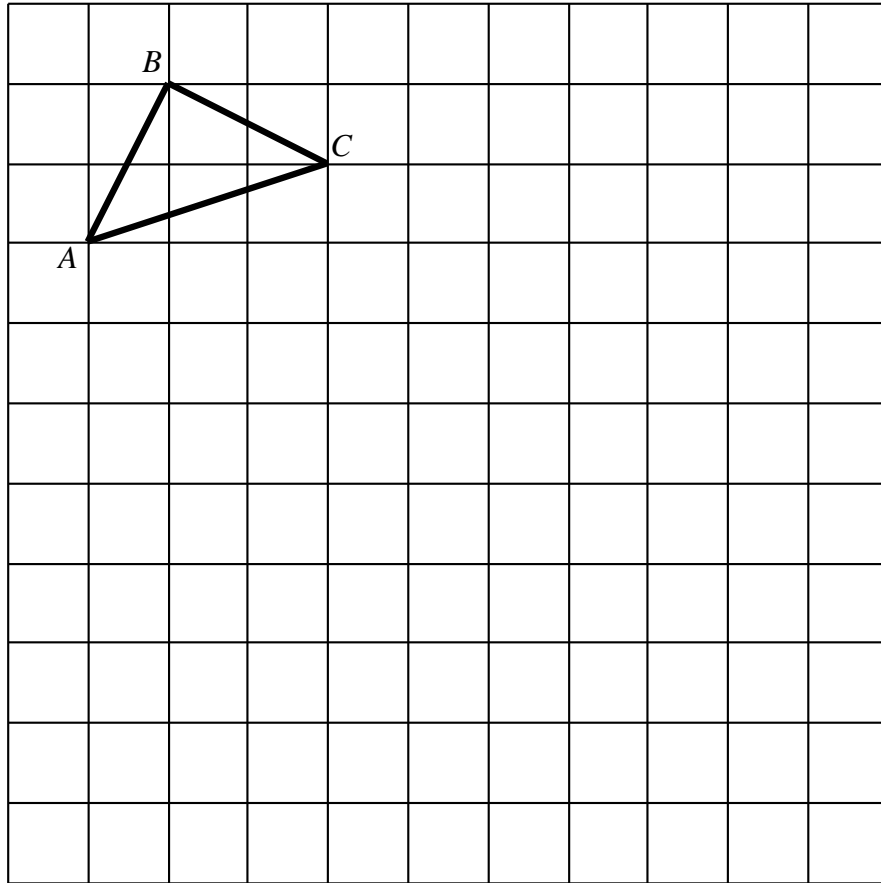


Diagram 7
Rajah 7

8. Diagram 8 in the answer space shows a polygon $ABCDEF$ and a straight line PQ drawn on a grid of equal squares. Starting from the line PQ , draw polygon $PQRSTU$ which congruent to polygon $ABCDEF$.

Rajah 8 di ruang jawapan menunjukkan sebuah polygon $ABCDEF$ dan garis lurus PQ yang dilukis pada segiempat grid. Bermula dengan garis lurus PQ , lukiskan polygon $PQRSTU$ yang kongruen dengan poligon $ABCDEF$.

[3 marks]
[3 markah]

Answer / Jawapan:

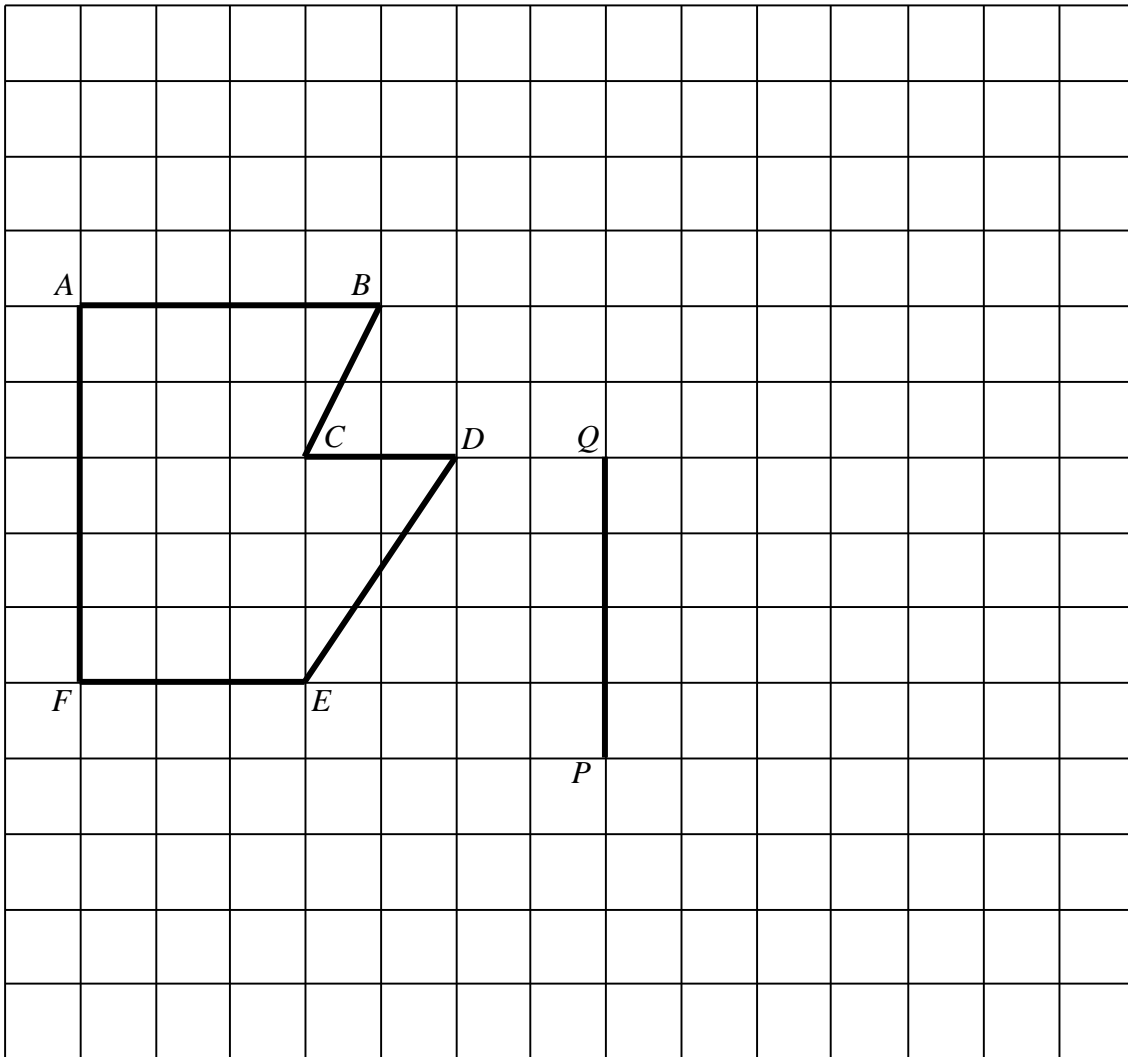


Diagram 8
Diagram 8

For
Examiner's
Use

9. Diagram 9 is drawn on a grid of equal squares. S is the image of T under transformation V.

Rajah 9 dilukis pada grid segiempat sama. S ialah imej bagi T di bawah penjelmaan V.

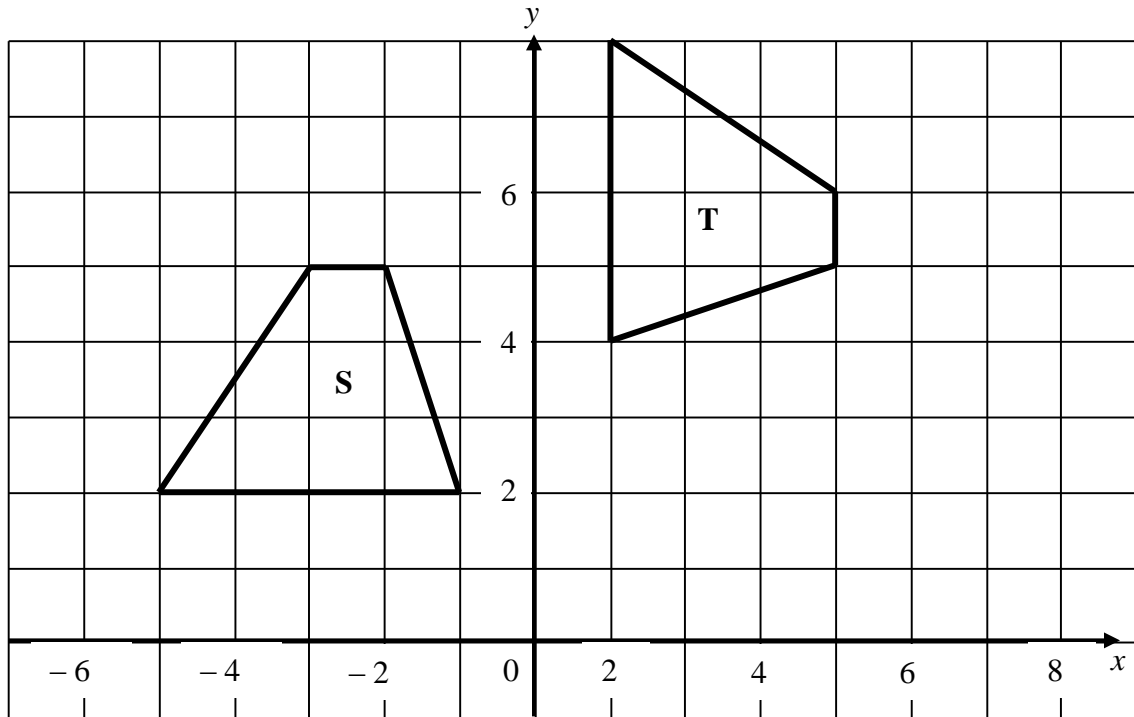


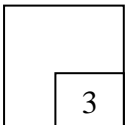
Diagram 9
Rajah 9

Describe fully transformation V.
Huraikan selengkapnya penjelmaan V.

[3 marks]
[3 markah]

Answer / Jawapan:

9



10. Diagram 10 shows a hexagon J drawn on a grid of equal squares with sides of 1 unit.

Rajah 10 menunjukkan sebuah heksagon J dilukis di atas grid terdiri daripada segiempat sama bersisi 1 unit.

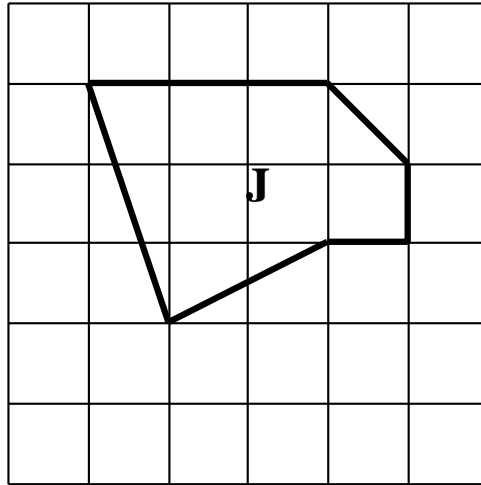


Diagram 10

Rajah 10

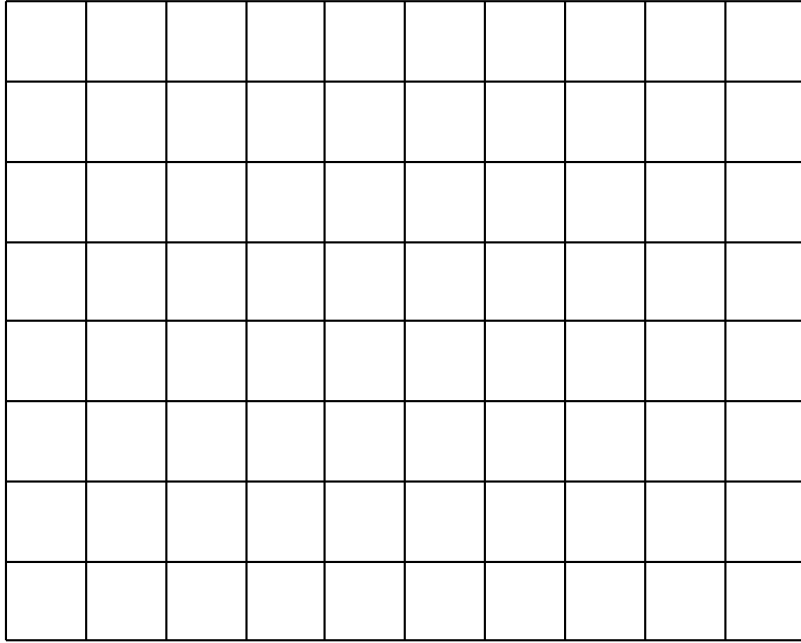
On the grid in the answer space, redraw the hexagon J using the scale $1: \frac{1}{2}$.

Pada grid di ruang jawapan, lukis semula heksagon J menggunakan skala $1: \frac{1}{2}$.

[3 marks]

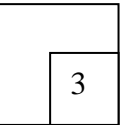
[3 markah]

Answer / Jawapan:



For
Examiner's
Use

10



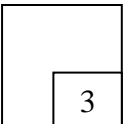
11. Express $\frac{1}{3p} + \frac{3q-3}{9pq}$ as a single fraction in its simplest form.

Ungkapkan $\frac{1}{3p} + \frac{3q-3}{9pq}$ sebagai satu pecahan tunggal dalam bentuk termudah.

[3 marks]
[3 markah]

Answer / Jawapan:

11

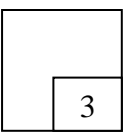


12. Given that $3r - 2s = \frac{5s}{r}$. Express s in terms of r .

Diberi bahawa $3r - 2s = \frac{5s}{r}$. Ungkapkan s dalam sebutan r .

[3 marks]
[3 markah]

12



Answer / Jawapan:

13. Given that $\frac{3(m-2)}{4} = 6$, find the value of m .

Diberi bahawa $\frac{3(m-2)}{4} = 6$, kirakan nilai bagi m .

Answer / Jawapan:

[3 marks]
[3 markah]

For
Examiner's
Use

13

3

14. Find the value of .
Cari nilai bagi

$$\frac{8^{\frac{1}{3}} \times 4^2 \times 2^{-2}}{2^3}$$

Answer / Jawapan:

[3 marks]
[3 markah]

14

3

15. Solve each of the following equations :
Selesaikan tiap-tiap persamaan berikut :

(a) $2z = 27 - z$

(b) $2 - 5(p + 3) = 13$

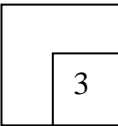
[3 marks]
 [3 markah]

Answer / *Jawapan:*

(a)

(b)

15



For
 Examiner's
 Use

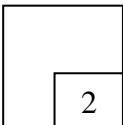
16. Solve the following inequality
Selesaikan ketaksamaan berikut :

$$15 - 4y \geq 5 + y$$

[2 marks]
 [2 markah]

Answer / *Jawapan:*

16



17. Table 17 shows the mass, in kg, 20 students.
Jadual 17 menunjukkan jisim, dlm kg, bagi 20 orang pelajar.

Mass(kg)	50	60	70	80
Frequency	4	8	6	2
Position				

Table 17
Jadual 17

- (a) Complete the table.
Lengkapkan jadual

- (b) State the median.
Nyatakan median.
- (c) State the mode of data.
Nyatakan mod data itu.

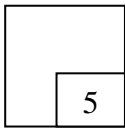
[5 marks]
[5 markah]

Answer / Jawapan:

(b)

(c)

17



18. Diagram 18 in the answer space shows a square $PQRS$ drawn on a grid of equal squares with sides of 1 unit. A, B and C are three moving points in the diagram.
Rajah 18 di ruang jawapan menunjukkan sebuah segi empat sama $PQRS$ dilukis di atas grid segiempat sama bersisi 1 unit. A, B dan C adalah titik bergerak di dalam rajah.

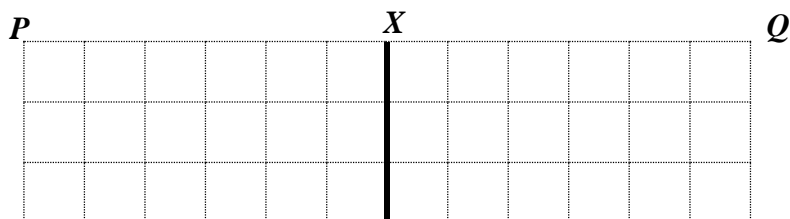
*For
Examiner's
Use*

- (a) A is the point at which moves such that $PA = RA$. By using the letters in the diagram state the locus of A .
 A ialah titik yang bergerak dengan $PA=RA$. Dengan menggunakan huruf abjad pada rajah nyatakan lokus A .
- (b) On the diagram, draw
Di atas rajah, lukis
 - (i) the locus for the point B that is constantly 4 units from the point Y .
lokus bagi titik B dengan keadaan sentiasa berjarak 4 unit dari titik Y .
 - (ii) the locus for the point C that is constantly 2 units from the straight line XYZ .
lokus bagi titik C yang sentiasa berjarak 2 unit dari garis lurus XYZ .
- (c) Hence, state the number of intersection of the locus of B and the locus of C .
Seterusnya, nyatakan bilangan persilangan bagi lokus B dan lokus C .

[5 marks]
[5 markah]

Answer / Jawapan:

- (a)
- (b) (i), (ii)



11

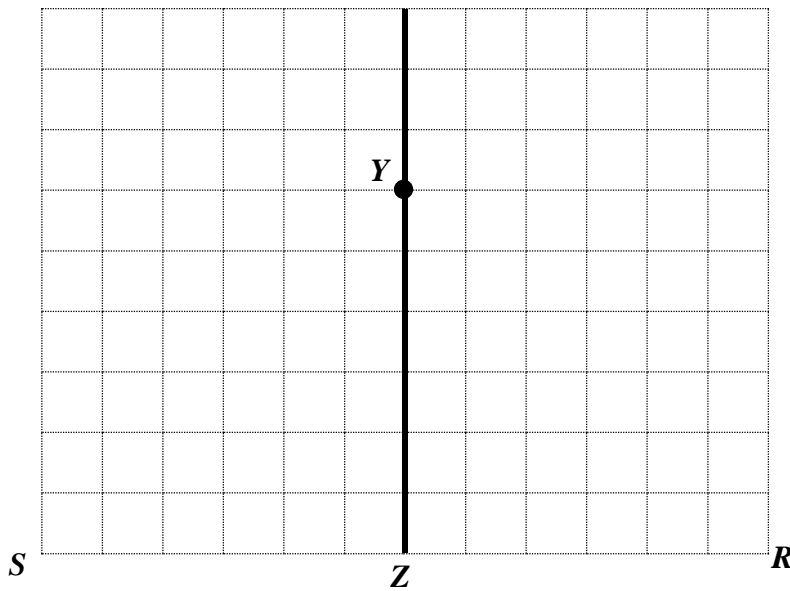


Diagram 18
Rajah 18

18
3

(c)

For
Examiner's
Use

19. Diagram 19 shows the straight line MN .
Starting with the line MN in the Diagram 19 in the answer space, construct parallelogram $KLMN$ with the side of $LM = 6$ cm and $\angle LMN = 30^\circ$.

*Rajah 19, menunjukkan satu garis lurus MN .
Bermula dengan garis lurus MN dalam Rajah 19 di ruangan jawapan, binakan segiempat selari $KLMN$ dengan panjang sisi $LM = 6$ cm dan $\angle LMN = 30^\circ$.*

[5 marks]
[5 markah]

Answer / Jawapan:

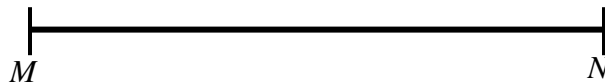
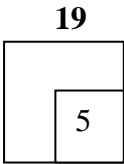


Diagram 19
Rajah 19



;

- 20** Use the graph paper provided to answer this question.
Gunakan kertas graf yang disediakan untuk menjawab soalan ini.

*For
Examiner's
Use*

Table 20 shows the values of two variables, x and y of a function.
Jadual 20 menunjukkan nilai-nilai dua pembolehubah, x dan y bagi suatu fungsi.

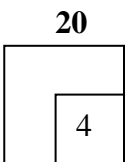
x	-2	-1	0	1	2	3
y	-6	0	4	6	6	4

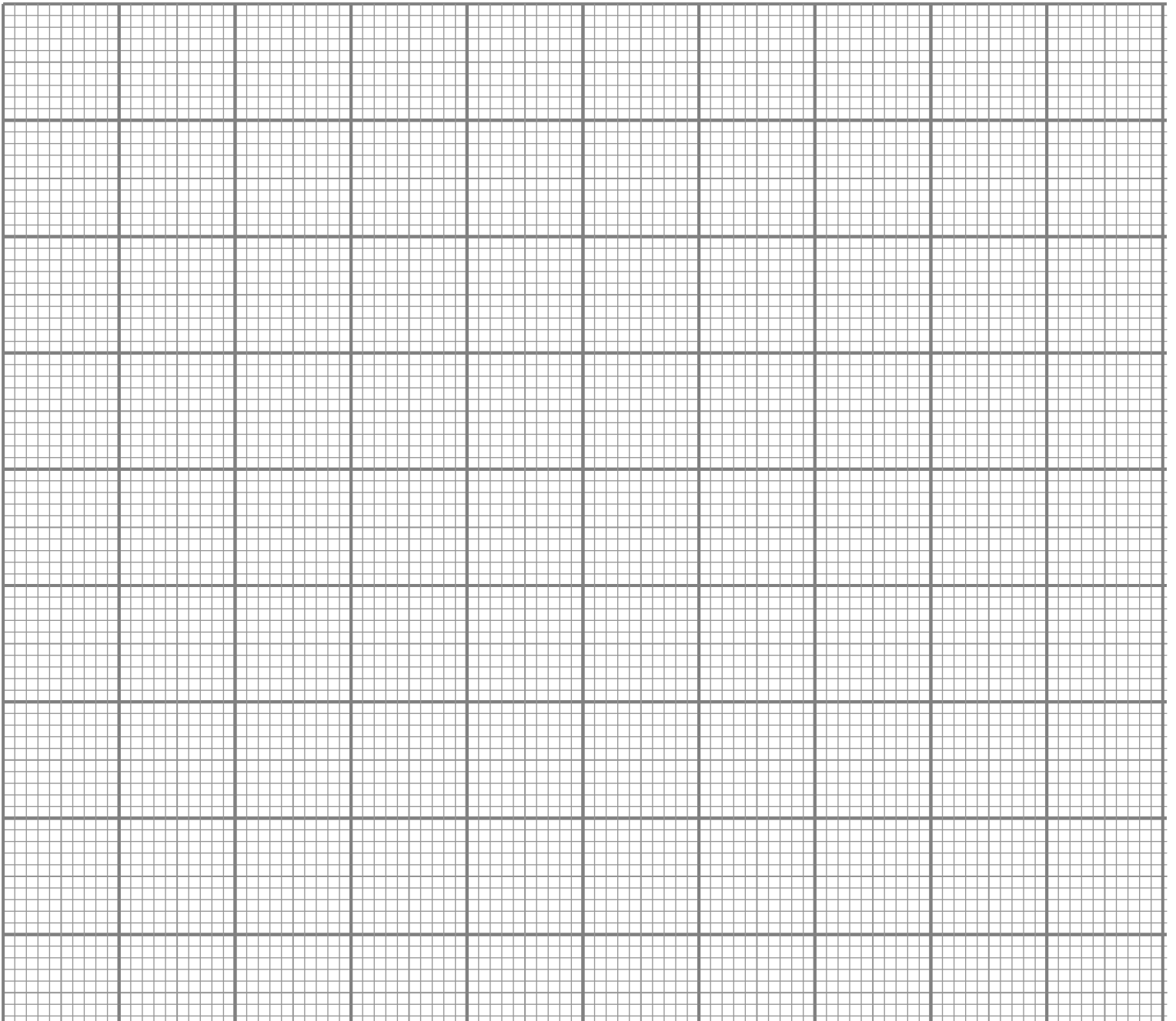
Table 11

Using a scale of 2 cm to 1 unit on the x -axis and 2 cm to 2 units on the y -axis, draw the graph.

Dengan menggunakan skala 2 cm kepada 1 unit bagi paksi- x dan 2 cm kepada 2 unit bagi paksi- y , lukiskan graf bagi fungsi itu.

[5 marks]
[5 markah]





50/2

**END OF QUESTION PAPER
KERTAS SOALAN TAMAT**