

SULIT

**PROGRAM GEMPUR KECEMERLANGAN
SIJIL PELAJARAN MALAYSIA 2018**

SIJIL PELAJARAN MALAYSIA 2018

MATHEMATICS

1449/1

Kertas 1

Ogos

$1\frac{1}{4}$ jam

Satu jam lima belas minit

JANGAN BUKA KERTAS PEPERIKSAAN INI SEHINGGA DIBERITAHU

- 1 *Kertas peperiksaan ini adalah dalam dwibahasa.*
- 2 *Soalan dalam bahasa Inggeris mendahului soalan yang sepadan dalam bahasa Melayu.*
- 3 *Calon dikehendaki membaca maklumat di halaman belakang kertas peperiksaan ini.*

Kertas peperiksaan ini mengandungi **32** halaman bercetak.

MATHEMATICAL FORMULAE
RUMUS MATEMATIK

The following formulae may be helpful in answering the questions. The symbols given are the ones commonly used.

Rumus-rumus berikut boleh membantu anda menjawab soalan. Simbol-simbol yang diberi adalah yang biasa digunakan.

RELATIONS
PERKAITAN

$$1 \quad a^m \times a^n = a^{m+n}$$

$$2 \quad a^m \div a^n = a^{m-n}$$

$$3 \quad (a^m)^n = a^{mn}$$

$$4 \quad A^{-1} = \frac{1}{ad - bc} \begin{pmatrix} d & -b \\ -c & a \end{pmatrix}$$

$$5 \quad \text{Distance / Jarak} \\ = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$6 \quad \text{Midpoint / Titik Tengah} \\ (x, y) = \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

$$7 \quad \text{Average speed} = \frac{\text{distance travelled}}{\text{time taken}}$$

$$\text{Purata laju} = \frac{\text{jarak yang dilalui}}{\text{masa yang diambil}}$$

$$8 \quad \text{Mean} = \frac{\text{sum of data}}{\text{number of data}}$$

$$\text{Min} = \frac{\text{hasil tambah nilai data}}{\text{bilangan data}}$$

$$9 \quad \text{Mean} = \frac{\text{sum of (midpoint} \times \text{frequency)}}{\text{sum of frequencies}}$$

$$\text{Min} = \frac{\text{hasil tambah (nilai titik tengah kelas} \times \text{kekerapan)}}{\text{hasil tambah kekerapan}}$$

$$10 \quad \text{Pythagoras Theorem} \\ \text{Teorem Pithagoras} \\ c^2 = a^2 + b^2$$

$$11 \quad P(A) = \frac{n(A)}{n(S)}$$

$$12 \quad P(A') = 1 - P(A)$$

$$13 \quad m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$14 \quad m = -\frac{y - \text{intercept}}{x - \text{intercept}} \\ m = -\frac{\text{pintasan} - y}{\text{pintasan} - x}$$

SHAPES AND SPACE
BENTUK DAN RUANG

- 1 Area of trapezium = $\frac{1}{2} \times \text{sum of parallel sides} \times \text{height}$
Luas trapezium = $\frac{1}{2} \times \text{hasil tambah dua sisi selari} \times \text{tinggi}$
- 2 Circumference of circle = $\pi d = 2\pi r$
Lilitan bulatan = $\pi d = 2\pi r$
- 3 Area of circle = πr^2
Luas bulatan = πr^2
- 4 Curved surface area of cylinder = $2\pi rh$
Luas permukaan melengkung silinder = $2\pi rt$
- 5 Surface area of sphere = $4\pi r^2$
Luas permukaan sfera = $4\pi r^2$
- 6 Volume of right prism = cross sectional area \times length
Isi padu prisma tegak = luas keratan rentas \times panjang
- 7 Volume of cylinder = $\pi r^2 h$
Isi padu silinder = $\pi r^2 t$
- 8 Volume of cone = $\frac{1}{3}\pi r^2 h$
Isi padu kon = $\frac{1}{3}\pi r^2 t$
- 9 Volume of sphere = $\frac{4}{3}\pi r^3$
Isi padu sfera = $\frac{4}{3}\pi r^3$
- 10 Volume of right pyramid = $\frac{1}{3} \times \text{base area} \times \text{height}$
Isi padu pyramid tegak = $\frac{1}{3} \times \text{luas tapak} \times \text{tinggi}$
- 11 Sum of interior angles of a polygon
Hasil tambah sudut pedalaman polygon
 $= (n - 2) \times 180^\circ$

$$12 \quad \frac{\text{arc length}}{\text{circumference of circle}} = \frac{\text{angle subtended at centre}}{360^\circ}$$

$$\frac{\text{panjang lengkok}}{\text{lilitan bulatan}} = \frac{\text{sudut pusat}}{360^\circ}$$

$$13 \quad \frac{\text{area of sector}}{\text{area of circle}} = \frac{\text{angle subtended at centre}}{360^\circ}$$

$$\frac{\text{luas sektor}}{\text{luas bulatan}} = \frac{\text{sudut pusat}}{360^\circ}$$

$$14 \quad \text{Scale factor, } k = \frac{PA'}{PA}$$

$$\text{Faktor skala, } k = \frac{PA'}{PA}$$

$$15 \quad \text{Area of image} = k^2 \times \text{area of object}$$

$$\text{Luas imej} = k^2 \times \text{luas objek}$$

- 1 Round off 37 853 correct to three significant figures.
Bundarkan 37 853 betul kepada tiga angka bererti.

A 37 000
B 37 800
C 37 900
D 39 000

- 2 Express 0.0000708 in standard form.
Ungkapkan 0.0000708 dalam bentuk piawai.

A 7.08×10^4
B 7.08×10^5
C 7.08×10^{-4}
D 7.08×10^{-5}

- 3 $0.000057 - 3 \times 10^{-7}$

A 2.7×10^{-5}
B 2.7×10^{-7}
C 5.67×10^{-5}
D 5.67×10^{-7}

- 4 The diameter of the earth is 12 742 km.
Calculate the surface area of the earth, in km^2 .
Diameter bumi ialah 12 742 km.
Hitung luas permukaan bumi, dalam km^2 .
(Use/Guna $\pi = 3.142$)

A 8.007×10^4
B 5.101×10^8
C 4.00×10^4
D 1.083×10^{12}

- 5 Diagram 1 shows a number card in base five.
Rajah 1 menunjukkan satu kad nombor dalam asas lima.

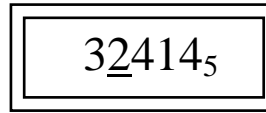


Diagram 1
Rajah 1

State the value of the underlined digit, in base ten.
Nyatakan nilai bagi digit yang bergaris, dalam asas sepuluh.

- A 1 250
B 250
C 50
D 10
- 6 Given $M_2 + 1011_2 = 11001_2$.
Find the value of M .
*Diberi $M_2 + 1011_2 = 11001_2$.
Cari nilai bagi M .*
- A 10 0100
B 10 000
C 1 100
D 1 110

- 7 In Diagram 2, $PQRSTU$ is a hexagon and RSV is a straight line.
Dalam Rajah 2, $PQRSTU$ ialah heksagon dan RSV ialah garis lurus.

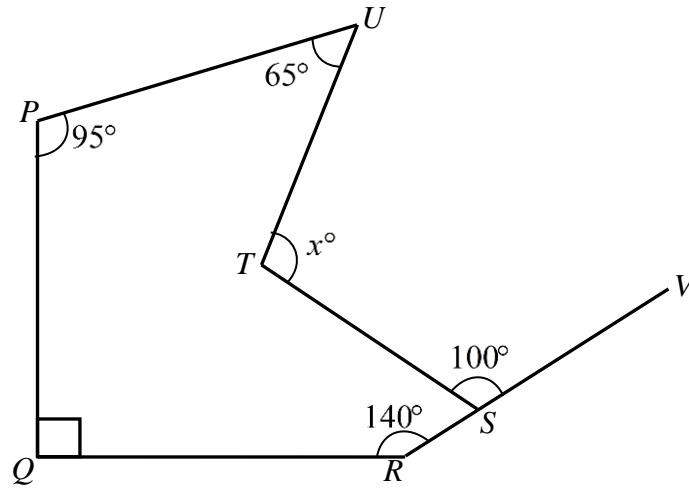


Diagram 2
Rajah 2

Find the value of x .
Cari nilai x .

- A 110
- B 105
- C 100
- D 95

- 8 In Diagram 3, $PQRST$ is a pentagon and $RSTUVW$ is a regular hexagon. PTU and QRW are straight lines.
 Dalam Rajah 3 $PQRST$ ialah sebuah pentagon dan $RSTUVW$ ialah heksagon sekata. PTU dan QRW ialah garis lurus.

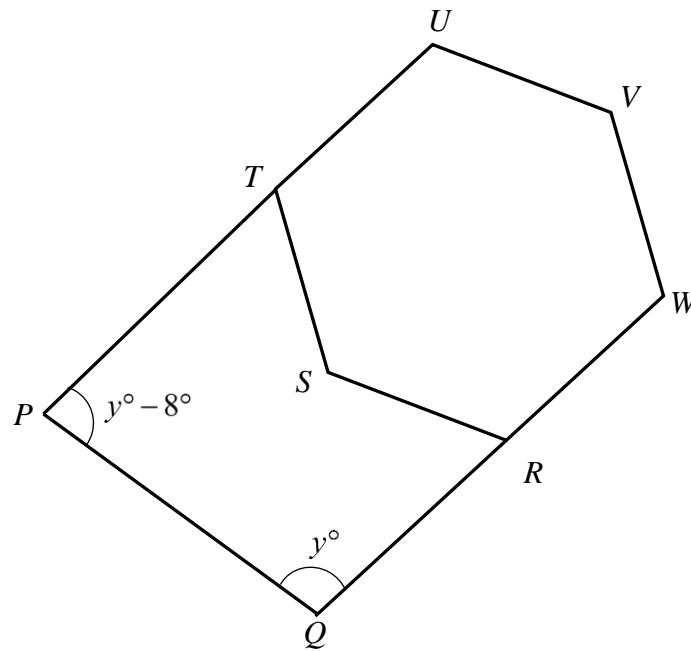


Diagram 3
Rajah 3

Find the value of y .
Cari nilai y .

- A 86
- B 90
- C 94
- D 102

- 9 Diagram 4 shows a circle BCD with tangent ADE . ABC is a straight line.
Rajah 4 menunjukkan sebuah bulatan dengan tangen ADE . ABC ialah garis lurus.

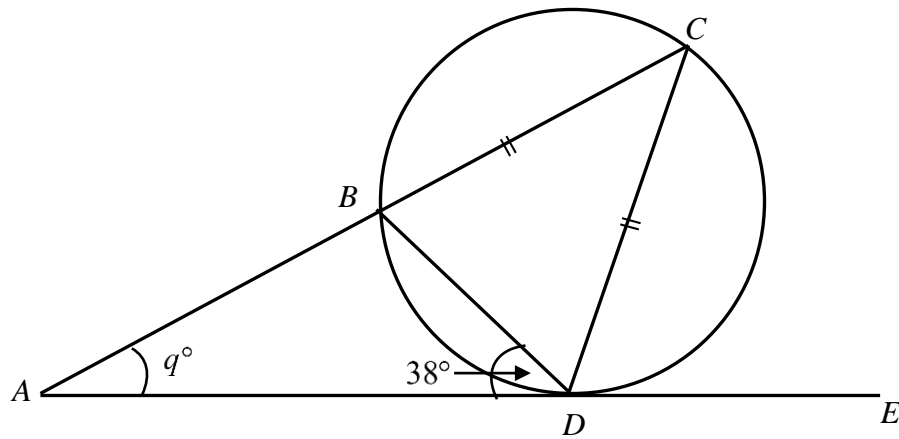


Diagram 4
Rajah 4

Find the value of q .
Cari nilai q .

- A** 33
B 38
C 52
D 71

- 10 Diagram 5 shows points P , Q , R and S on the Cartesian Plane.
Rajah 5 menunjukkan titik – titik P , Q , R dan S di atas Satah Cartes.

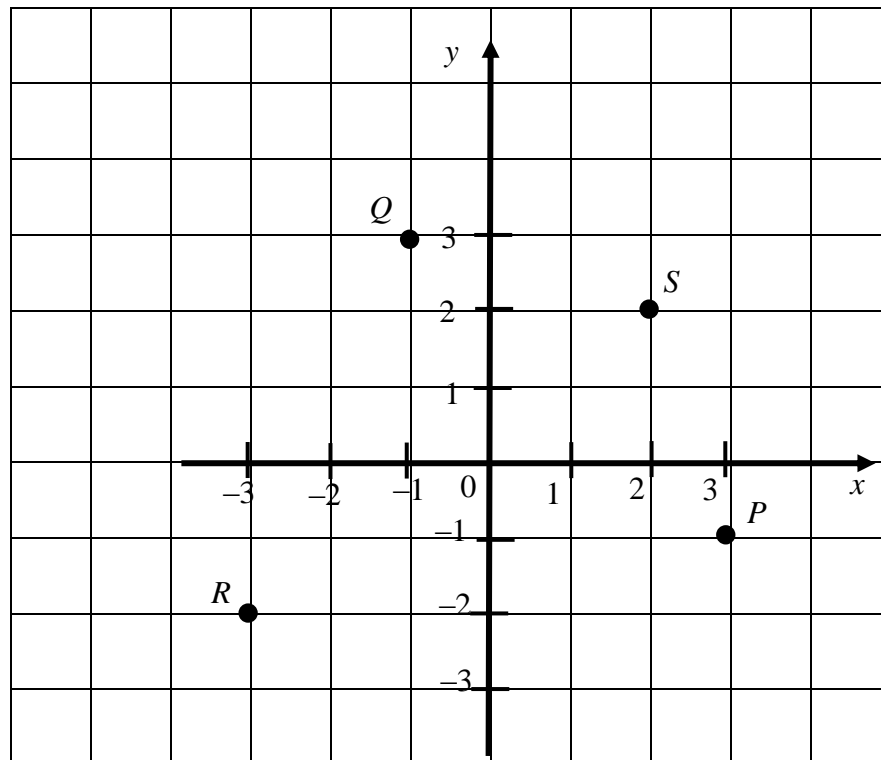


Diagram 5
Rajah 5

Find the correct pairing of the object, line of reflection and its image.
Cari pasangan yang betul bagi objek, paksi pantulan, dan imejnya.

	Object <i>Objek</i>	Axis of reflection <i>Paksi pantulan</i>	Coordinate of image <i>Koordinat Imej</i>
A	P	y -axis <i>paksi-y</i>	P' (1, 3)
B	Q	y -axis <i>paksi-y</i>	Q' (3, 1)
C	R	x -axis <i>paksi-x</i>	R' (-3, 2)
D	S	x -axis <i>paksi-x</i>	S' (2, -3)

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- 11 In Diagram 6, ABC is the image of DEC under an enlargement. Given that $CD = 8$ cm, $CE = 4$ cm and the scale factor of enlargement is 3.
Dalam Rajah 6, ABC ialah imej bagi DEC di bawah satu pembesaran. Diberi $CD = 8$ cm, $CE = 4$ cm dan faktor skala pembesaran itu ialah 3.

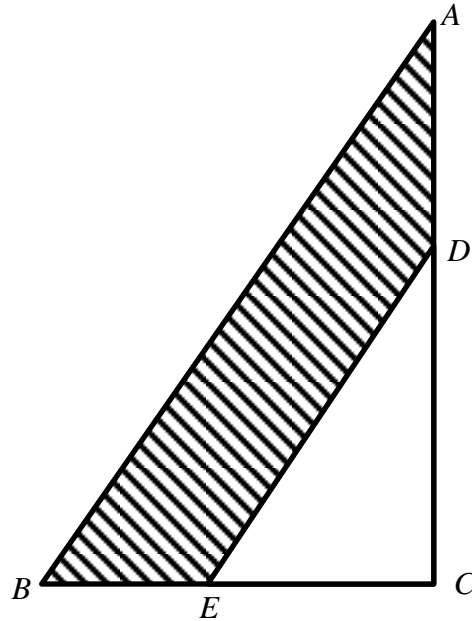
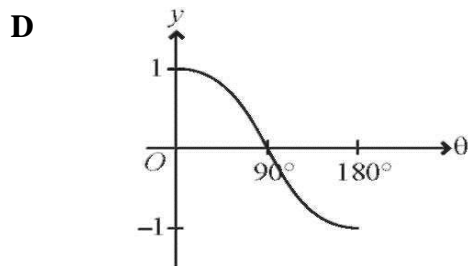
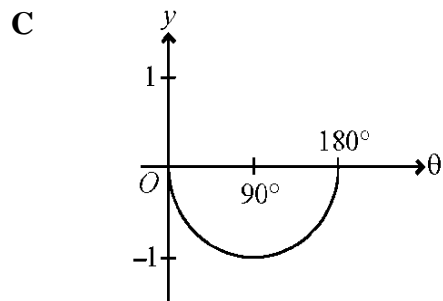
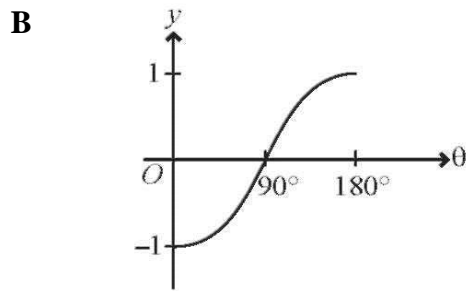
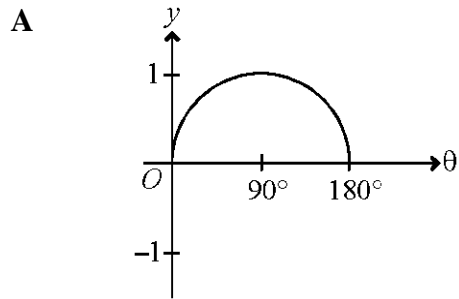


Diagram 6
Rajah 6

Calculate the area, in cm^2 , of shaded region.
Hitung luas dalam cm^2 , kawasan berlorek.

- A** 48
B 96
C 128
D 144

- 12 Which of the graph represents $y = -\cos x$ for $0^\circ \leq x \leq 180^\circ$.
Graf manakah yang mewakili $y = -\cos x$ bagi $0^\circ \leq x \leq 180^\circ$.



- 13 Diagram 7 shows a unit circle with centre O .
Rajah 7 menunjukkan sebuah bulatan unit yang berpusat O .

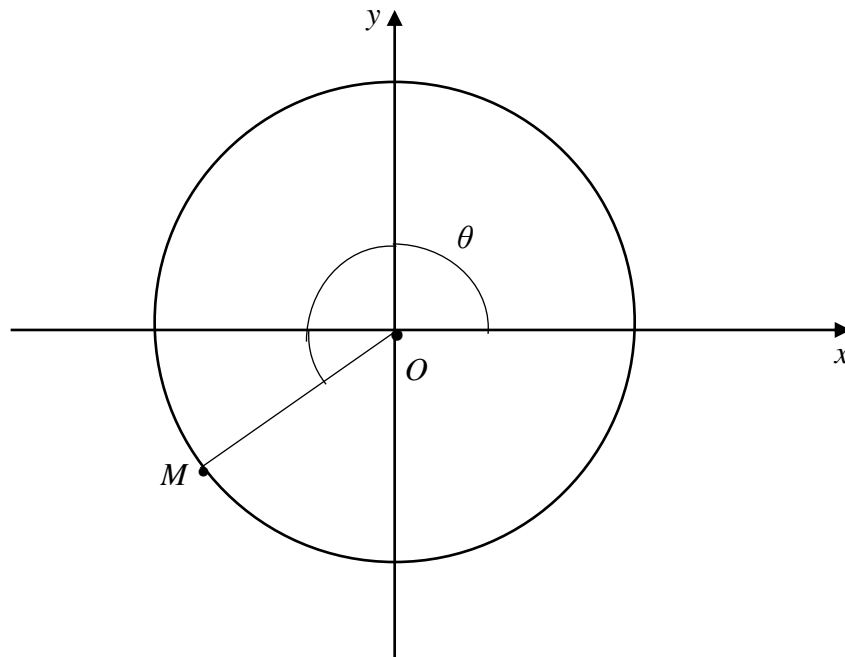


Diagram 7
Rajah 7

Given that $\theta = 210^\circ$, find the value of coordinate- y for the point M .
Diberi $\theta = 210^\circ$, cari nilai koordinat- y bagi titik M .

- A -0.866
- B -0.707
- C -0.6
- D -0.5

- 14 Diagram 8 shows a right prism $PQRSTU$ with a rectangular base $PQRS$.
Rajah 8 menunjukkan sebuah prisma tegak $PQRSTU$ dengan tapak segiempat tepat $PQRS$.

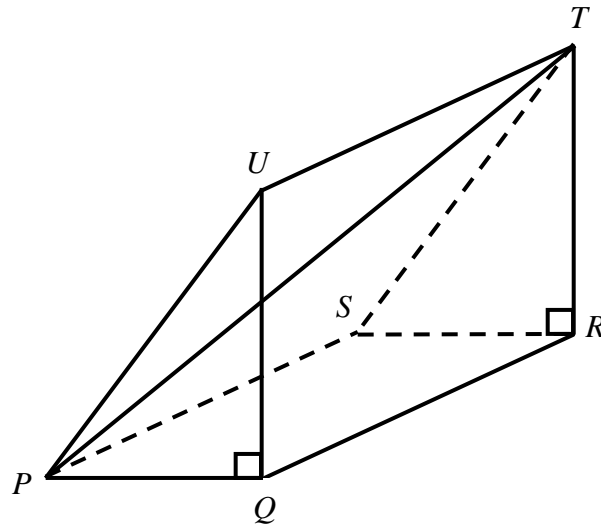


Diagram 8
Rajah 8

Name the angle between the straight line PT and the base $PQRS$.
Namakan sudut di antara garis lurus PT dengan tapak $PQRS$.

- A $\angle PTR$
 B $\angle TPQ$
 C $\angle TPS$
 D $\angle TPR$

- 15 Diagram 9 shows two vertical poles, GH and $CDEF$.
Rajah 9 menunjukkan dua tiang mencancang, GH dan $CDEF$.



Diagram 9
Rajah 9

It is given that $GH = DF$. Which of the following is the angle of elevation from point G ?
Diberi bahawa $GH = DF$. Antara yang berikut, yang manakah sudut dongakan dari titik G ?

- A $\angle GCD$
- B $\angle DGE$
- C $\angle CGD$
- D $\angle GDH$

- 16 Diagram 10 shows a tower on a horizontal plane. The angle of elevation of the aeroplane Y from vertex X is 70° .
Rajah 10 menunjukkan sebuah menara pada satah mengufuk. Sudut dongakan kapal terbang Y dari puncak X ialah 70° .

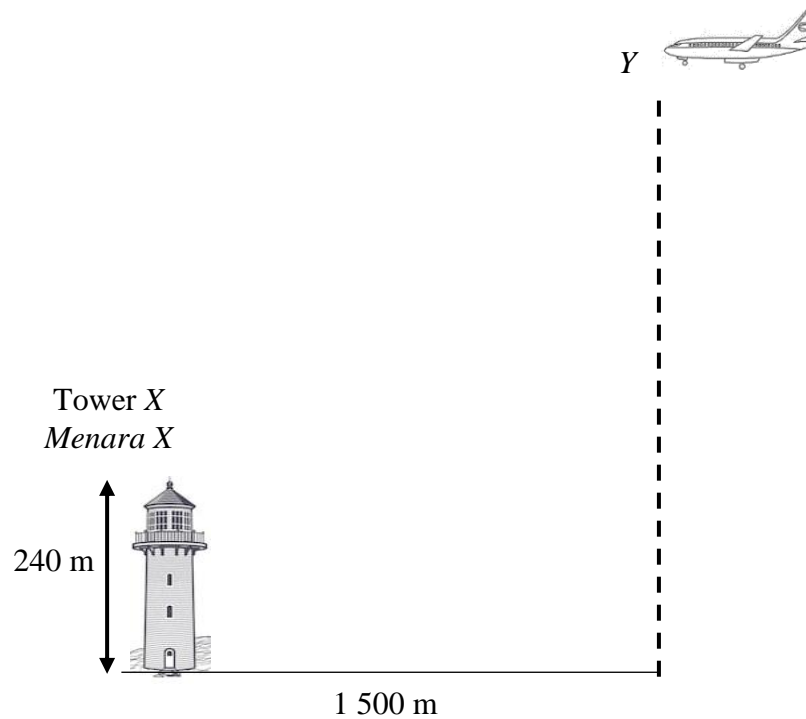


Diagram 10
Rajah 10

Calculate the height, in metre, of the aeroplane from the horizontal plane.
Hitung tinggi, dalam meter, kapal terbang dari satah mengufuk.

- A 4 361.22
- B 4121.22
- C 1649.54
- D 785.96

- 17 Diagram 11 shows three points, A , B and C on a horizontal plane. C lies due north of B and the bearing C from A is 70° .
Rajah 11 menunjukkan tiga titik, A , B dan C pada suatu satah mengufuk. C terletak ke utara B dan bearing C dari A ialah 70° .

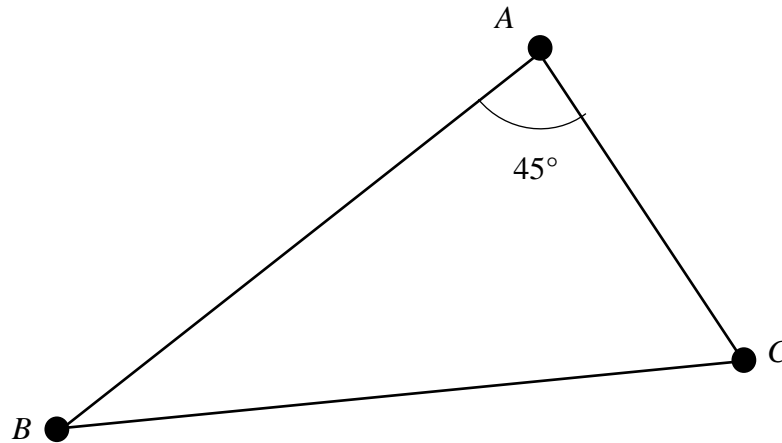


Diagram 11
Rajah 11

Find the bearing of A from B .
Cari bearing A dari B .

- A 065°
- B 245°
- C 295°
- D 335°

- 18 In Diagram 12, N is the North Pole and S is the South Pole, P , Q and R are three points on the earth and lie on the same meridian.
Dalam Rajah 12, U ialah Kutub Utara dan S ialah Kutub Selatan, P , Q dan R ialah tiga titik pada permukaan bumi dan terletak pada meridian yang sama.

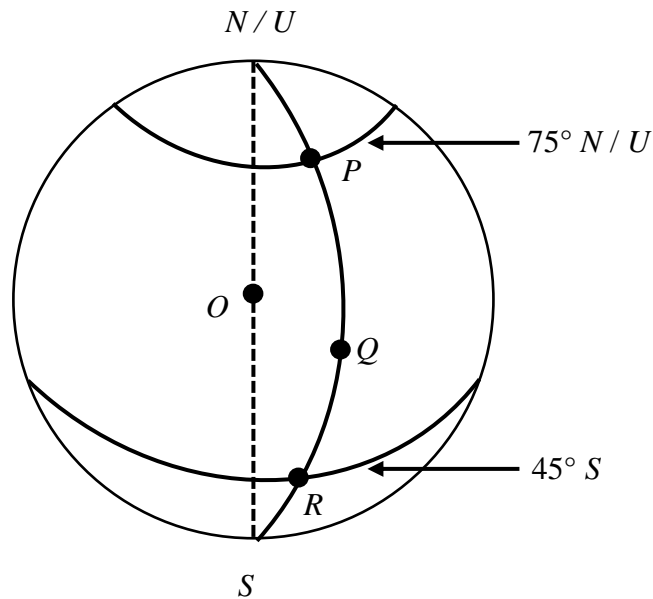


Diagram 12
 Rajah 12

Given $PQ = 2 QR$, find the latitude of Q .
Diberi $PQ = 2 QR$, cari latitud bagi Q .

- A $35^\circ N/U$
 B $35^\circ S$
 C $5^\circ N/U$
 D $5^\circ S$
- 19 $(2r + s)(r - s) - (r + s)^2 =$
- A $r^2 + rs$
 B $r^2 - rs$
 C $r^2 - rs - 2s^2$
 D $r^2 - 3rs - 2s^2$

20 Given $4(p - q) + \frac{q}{2} = p$, express p in terms of q .

Diberi $4(p - q) + \frac{q}{2} = p$, ungkapkan p dalam sebutan q .

A $p = \frac{7}{6}q$

B $p = \frac{6}{7}q$

C $p = \frac{6}{7q}$

D $p = \frac{7}{6q}$

21 Express $\frac{4 - x^2}{3xy - 6x} \div \frac{2 - x}{9xy}$ as a single fraction in its simplest form.

Ungkapkan $\frac{4 - x^2}{3xy - 6x} \div \frac{2 - x}{9xy}$ sebagai satu pecahan tunggal dalam bentuk termudah.

A $\frac{y - 2}{3y(2 - x)}$

B $\frac{y - 2}{3y(2 + x)}$

C $\frac{3y(2 - x)}{y - 2}$

D $\frac{3y(2 + x)}{y - 2}$

22 Given $\frac{8-10k}{5} = 4k - 2$ then $k =$

Diberi $\frac{8-10k}{5} = 4k - 2$, maka $k =$

A $-\frac{1}{5}$

B $\frac{1}{3}$

C $\frac{3}{5}$

D $\frac{9}{5}$

23 $\left(\frac{3}{7}\right)^{-2} =$

A $\frac{6}{49}$

B $\frac{49}{6}$

C $\frac{9}{49}$

D $\frac{49}{9}$

- 24 Simplify $(5^3 \times 8)^{\frac{1}{3}} \times (k^{\frac{1}{3}})^{-3}$.
Permudahkan $(5^3 \times 8)^{\frac{1}{3}} \times (k^{\frac{1}{3}})^{-3}$.
- A $\frac{192}{k^3}$
- B $\frac{40}{k}$
- C $\frac{36}{k^3}$
- D $\frac{10}{k}$
- 25 Find the solution for $3(7 - x) \geq 4x$.
Cari penyelesaian bagi $3(7 - x) \geq 4x$.
- A $x \geq 3$
- B $x \leq 3$
- C $x \leq -3$
- D $x \geq -3$
- 26 List all the integers of x which satisfy both inequalities $2x - 1 \geq 5$ and $\frac{x}{4} \leq \frac{3}{2}$.
Senaraikan semua integer x yang memuaskan kedua-dua ketaksamaan $2x - 1 \geq 5$ dan $\frac{x}{4} \leq \frac{3}{2}$.
- A 2, 3, 4
- B 2, 3, 4, 5
- C 3, 4, 5, 6
- D 4, 5, 6

- 27 Diagram 13 is a bar chart showing the number of handphones sold by three shops in March. The number of handphones sold by Shop Z is not shown.
Rajah 13 ialah carta bar yang menunjukkan bilangan telefon bimbit yang dijual oleh tiga buah kedai pada bulan Mac. Bilangan telefon bimbit yang dijual oleh Kedai Z tidak ditunjukkan.

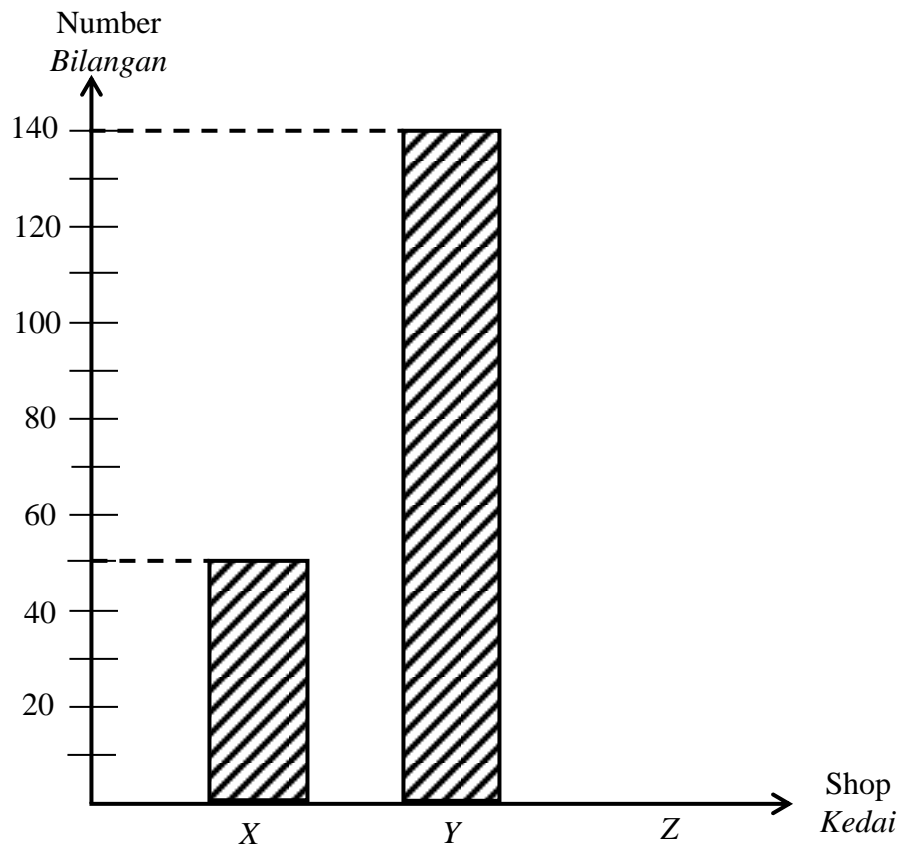


Diagram 13
Rajah 13

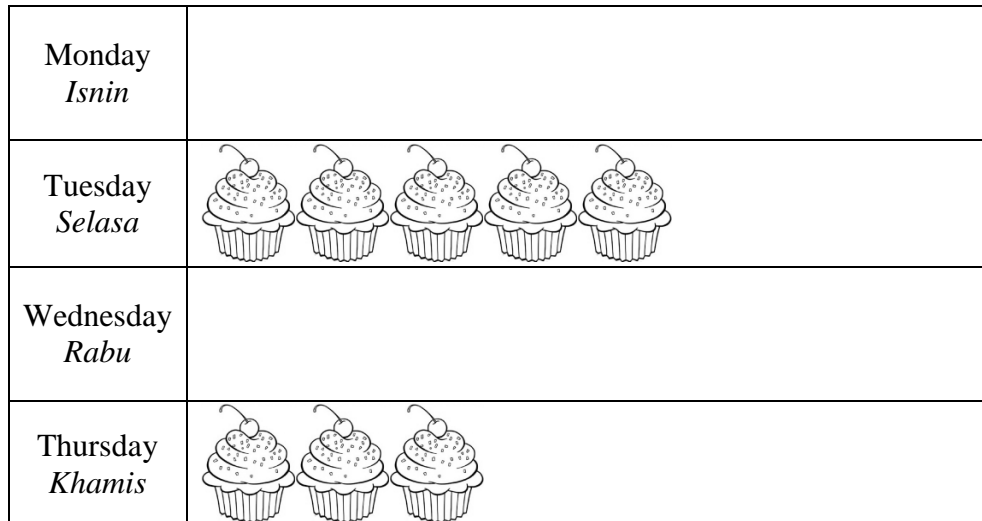
The number of handphones sold by Shop X and Shop Z is $\frac{3}{5}$ of the total number of handphones sold by the three shops. Calculate the number of handphones sold by Shop Z.
Bilangan telefon bimbit yang dijual oleh Kedai X dan Kedai Z ialah $\frac{3}{5}$ daripada jumlah telefon bimbit yang dijual oleh tiga buah kedai itu. Hitung bilangan telefon bimbit yang dijual oleh Kedai Z.

- A 75
- B 140
- C 160
- D 350

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- 28 Diagram 14 is an incomplete pictograph showing the sale of a cupcake at Kedai Kek Aleesya within four days. The number of cupcakes sold on Monday and Wednesday are not shown.

Rajah 14 ialah sebuah piktograf yang tidak lengkap menunjukkan jualan kek cawan di Kedai Kek Aleesya dalam masa empat hari. Bilangan kek cawan yang telah dijual pada hari Isnin dan Rabu tidak ditunjukkan.



represents 20 cupcakes
mewakili 20 biji kek cawan

Diagram 14
Rajah 14

400 cupcakes were sold within four days. The number of cupcakes sold on Monday is twice of the number of cupcakes sold on Wednesday. Calculate the number of cupcakes that have been sold on Monday.

400 biji kek cawan telah dijual dalam masa empat hari. Bilangan kek cawan yang telah dijual pada hari Isnin adalah 2 kali ganda bilangan kek cawan yang telah dijual pada hari Rabu. Hitung bilangan kek cawan yang telah dijual pada hari Isnin.

- A 160
- B 100
- C 80
- D 60

- 29 Table 1 shows the scores of a group of students in a Mathematics quiz.
Jadual 1 menunjukkan skor markah sekumpulan murid dalam suatu kuiz Matematik.

Score <i>Skor</i>	1 – 5	6 – 10	11 – 15	16 – 20	21 – 25
Frequency <i>Kekerapan</i>	4	x	3	2	1

Table 1
Jadual 1

Mean for the scores obtained by a student is 10.5. Find the value of x .
Min bagi markah yang diperolehi seorang murid itu ialah 10.5. Cari nilai x .

- A 2
- B 3
- C 4
- D 5

- 30 Diagram 15 shows a graph on a Cartesian plane.
Rajah 15 menunjukkan suatu graf pada satah Cartesian.

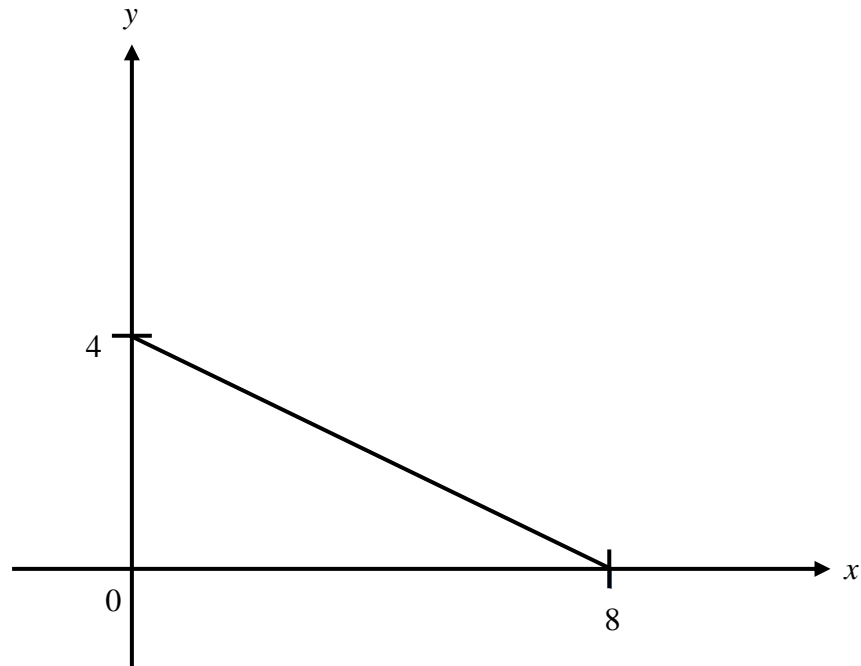
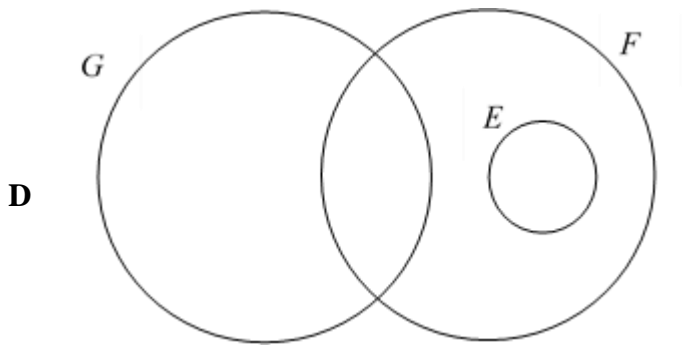
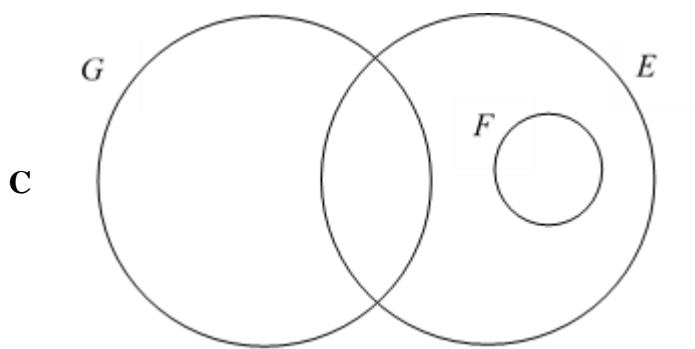
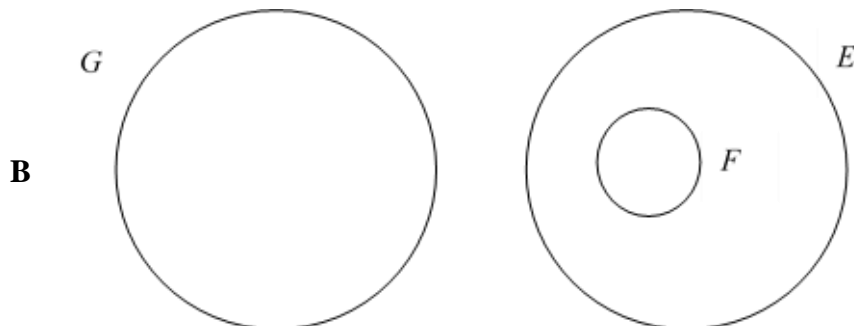
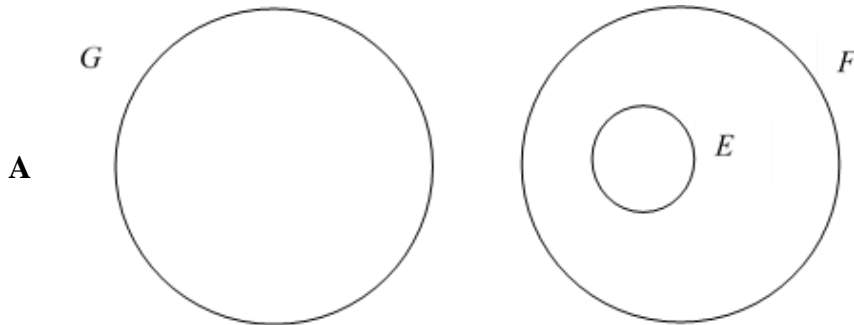


Diagram 15
Rajah 15

Which of the following is the equation of the graph?
Antara yang berikut, yang manakah adalah persamaan bagi graf itu?

- A $2y = x + 8$
- B $y = x + 4$
- C $2y = -x + 8$
- D $y = -x + 4$

- 31 Given that the universal set $\xi = E \cup F \cup G$, $E \subset F$ and $F \cap G \neq \phi$.
 Which Venn diagram represents these relationship?
*Diberi bahawa set semesta $\xi = E \cup F \cup G$, $E \subset F$ dan $F \cap G \neq \phi$.
 Gambar rajah Venn manakah yang mewakili hubungan ini?*



- 32 Diagram 16 is a Venn diagram showing the number of elements in the set P , set Q and set R .
Rajah 16 ialah gambar rajah Venn yang menunjukkan bilangan unsur dalam set P , set Q dan set R .

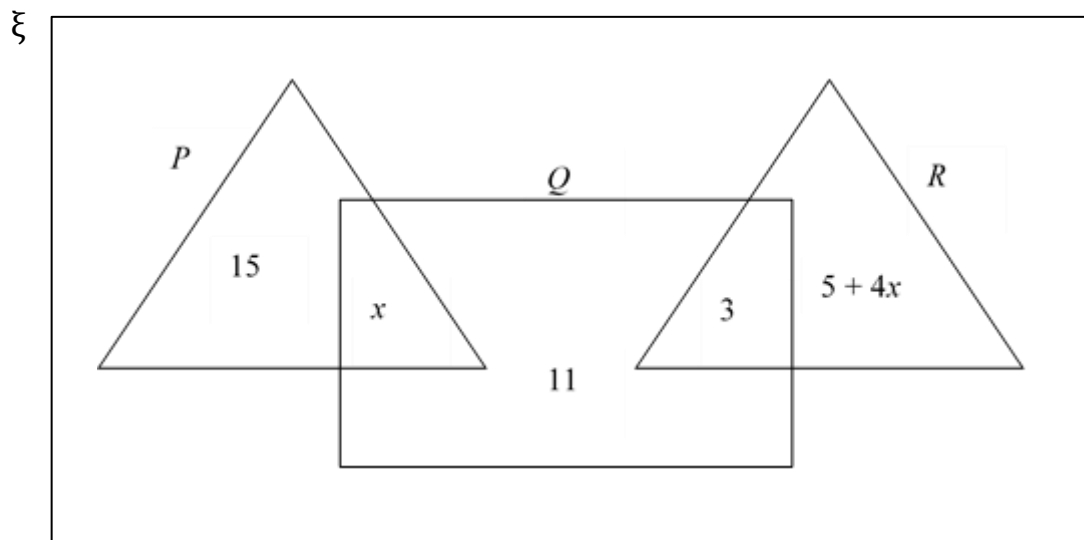


Diagram 16
Rajah 16

Given $n(P \cup Q) = n(R)$, find $n(\xi)$.
Diberi bahawa $n(P \cup Q) = n(R)$, cari $n(\xi)$.

- A 64
B 69
C 74
D 79
- 33 The equation for a straight line is $5x + 3y = 12$.
State the gradient and the y -intercept of the straight line.
Persamaan bagi suatu garis lurus ialah $5x + 3y = 12$.
Tentukan kecerunan dan pintasan- y bagi garis lurus itu.

	Gradient Kecerunan	y -intercept Pintasan- y
A	$\frac{5}{3}$	12
B	$-\frac{5}{3}$	4
C	$\frac{5}{3}$	4
D	$-\frac{5}{3}$	12

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- 34** A straight line passes through the points $(7, 10)$ and $(-4, -12)$.
Find the y-intercept of the straight line.
*Satu garis lurus melalui titik - titik $(7, 10)$ dan $(-4, -12)$.
Cari pintasan-y bagi garis lurus tersebut.*
- A** -20
- B** -13
- C** -4
- D** 24
-
- 35** In a class, there are 16 boys and some girls. A pupil is chosen at random from the class.
The probability of choosing a boy is $\frac{2}{3}$.
Find the number of girls in the class.
*Dalam sebuah kelas, terdapat 16 orang murid lelaki dan beberapa orang murid perempuan. Seorang murid dipilih secara rawak daripada kelas itu.
Kebarangkalian memilih seorang murid lelaki ialah $\frac{2}{3}$.
Cari bilangan murid perempuan dalam kelas itu.*
- A** 24
- B** 14
- C** 12
- D** 8

- 36 A box contains 40 marbles. There are 17 blue marbles, some green and red marbles. The probability of choosing a green marble is $\frac{3}{8}$.

If a marble is selected randomly from the box, find the probability that the marble is **not** a red marble.

Sebuah kotak mengandungi 40 biji guli. Terdapat 17 biji guli biru, beberapa biji guli hijau dan biji guli merah. Kebarangkalian memilih sebiji guli hijau ialah $\frac{3}{8}$.

*Jika sebiji guli dipilih secara rawak daripada kotak itu, cari kebarangkalian bahawa guli itu **bukan** guli merah.*

- A $\frac{1}{5}$
- B $\frac{4}{5}$
- C $\frac{5}{8}$
- D $\frac{7}{8}$

- 37 Given that p varies directly as square root of q and $p = 18$ when $q = 36$. Calculate the value of p when $q = 169$.

Diberi bahawa p berubah secara langsung dengan punca kuasa dua q dan $p = 18$ apabila $q = 36$.

Hitung nilai p apabila $q = 169$.

- A $\frac{13}{3}$
- B $\frac{3}{13}$
- C 39
- D 26

- 38** Table 2 shows the values of x , y and z . Given that x varies directly as the square of y and inversely as the cube root of z .

Jadual 2 menunjukkan nilai x , y dan z . Diberi bahawa x berubah secara langsung dengan kuasa dua y dan berubah secara songsang dengan punca kuasa tiga z

x	y	z
15	3	27
10	p	512

Table 2
Jadual 2

Calculate the value of p .

Hitung nilai p .

- A** 4
- B** 5
- C** 15
- D** 16

39 Given $\begin{pmatrix} -2 & 0 \\ 1 & -1 \end{pmatrix} + 3R = 2\begin{pmatrix} 7 & -3 \\ 2 & -5 \end{pmatrix}$, find matrix R .

Diberi $\begin{pmatrix} -2 & 0 \\ 1 & -1 \end{pmatrix} + 3R = 2\begin{pmatrix} 7 & -3 \\ 2 & -5 \end{pmatrix}$, cari matriks R .

A $\begin{pmatrix} -3 & 2 \\ -5 & 3 \end{pmatrix}$

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

C $\begin{pmatrix} 3 & 2 \\ 5 & -3 \end{pmatrix}$

D $\begin{pmatrix} 3 & -2 \\ 5 & -3 \end{pmatrix}$

40 $(3 \ 2) \begin{pmatrix} 1 & 2 \\ -2 & -1 \end{pmatrix} =$

A $\begin{pmatrix} -1 \\ 4 \end{pmatrix}$

B $(-1 \ 4)$

C $\begin{pmatrix} 7 \\ 8 \end{pmatrix}$

D $(7 \ 8)$

END OF QUESTION PAPER
KERTAS PEPERIKSAAN TAMAT

INFORMATION FOR CANDIDATES
MAKLUMAT UNTUK CALON

1. This question paper consists of **40** questions.
*Kertas soalan ini mengandungi **40** soalan.*
2. Answer **all** questions.
*Jawab **semua** soalan.*
3. Answer each question by blackening the correct space on the objective answer sheet.
Jawab setiap soalan dengan menghitamkan ruangan yang betul pada kertas jawapan objektif.
4. Blacken only **one** space for each question.
*Hitamkan **satu** ruangan sahaja bagi setiap soalan.*
5. If you wish to change your answer, erase the blackened mark that you have done. Then blacken the space for the new answer.
Sekiranya anda hendak menukar jawapan, padamkan tanda yang telah dibuat. Kemudian hitamkan jawapan yang baharu.
6. The diagram in the questions provided are not drawn to scale unless stated.
Rajah yang mengiringi soalan tidak dilukis megikut skala kecuali dinyatakan.
7. A list of formulae is provided on page 2 to 4.
Satu senarai rumus disediakan di halaman 2 hingga 4.
8. You may use a scientific calculator.
Anda dibenarkan menggunakan kalkulator saintifik.