

NO. KAD PENGENALAN

						-			-				
--	--	--	--	--	--	---	--	--	---	--	--	--	--

ANGKA GILIRAN

--	--	--	--	--	--	--	--	--



SOALAN PRAKTIS BESTARI
PROJEK JAWAB UNTUK JAYA (JUU) 2019



SIJIL PELAJARAN MALAYSIA

1449/1

MATHEMATICS

Kertas 1 (SET 2)

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

Satu jam lima belas minit

JANGAN BUKA KERTAS SOALAN INI SEHINGGA DIBERITAHU

1. Kertas soalan 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 soalan ini.

Kertas soalan ini mengandungi 30 halaman bercetak dan 1 halaman tidak bercetak.

[Lihat halaman sebelah]

SULIT**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**

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

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

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

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

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

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

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

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

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

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

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

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

$$10 \quad \text{Pythagoras Theorem / Teorem Pithagoras}$$

$$c^2 = a^2 + b^2$$

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

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

SULIT

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

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

$$m = - \frac{\text{perpendicular distance} - y}{\text{perpendicular distance} - x}$$

SHAPES AND SPACE**BENTUK DAN RUANG**

$$1 \quad \text{Area of trapezium} = \frac{1}{2} \times \text{sum of parallel sides} \times \text{height}$$

$$\text{Luas trapezium} = \frac{1}{2} \times \text{hasil tambah dua sisi selari} \times \text{tinggi}$$

$$2 \quad \text{Circumference of circle} = \pi d = 2\pi r$$

$$\text{Lilitan bulatan} = \pi d = 2\pi r$$

$$3 \quad \text{Area of circle} = \pi r^2$$

$$\text{Luas bulatan} = \pi r^2$$

$$4 \quad \text{Curved surface area of cylinder} = 2\pi rh$$

$$\text{Luas permukaan melengkung silinder} = 2\pi rt$$

$$5 \quad \text{Surface area of sphere} = 4\pi r^2$$

$$\text{Luas permukaan sfera} = 4\pi r^2$$

$$6 \quad \text{Volume of right prism} = \text{cross sectional area} \times \text{length}$$

$$\text{Isipadu prisma tegak} = \text{luas kerentasan} \times \text{panjang}$$

$$7 \quad \text{Volume of cylinder} = \pi r^2 h$$

$$\text{Isipadu silinder} = \pi r^2 t$$

$$8 \quad \text{Volume of cone} = \frac{1}{3} \pi r^2 h$$

$$\text{Isipadu kon} = \frac{1}{3} \pi r^2 t$$

SULIT

9 Volume of sphere = $\frac{4}{3}\pi r^3$

Isipadu sfera = $\frac{4}{3}\pi j^3$

10 Volume of right pyramid = $\frac{1}{3} \times \text{base area} \times \text{height}$

Isipadu piramid tegak = $\frac{1}{3} \times \text{luas tapak} \times \text{tinggi}$

11 Sum of interior angles of a polygon

Hasil tambah sudut pedalaman poligon

= $(n-2) \times 180^\circ$

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

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

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

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

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

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

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

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

SULIT

- 1 Round off 853476 correct to three significant figures

Bundarkan 853476 betul kepada tiga angka bererti.

- A 853
- B 854
- C 853000
- D 854000

- 2 $0.000057 - 3.6 \times 10^{-4} =$

$0.000057 - 3.6 \times 10^{-4} =$

- A 2.03×10^{-4}
- B -3.03×10^{-4}
- C 3.03×10^4
- D -2.03×10^{-4}

3. Calculate $p - 2q$ and express the answer standard form. Given $p = 1.64 \times 10^{-3}$ and $q = 6.5 \times 10^{-5}$

Hitung $p - 2q$ dan ungkapkan jawapan dalam bentuk piawai. Diberi $p = 1.64 \times 10^{-3}$ dan $q = 6.5 \times 10^{-5}$

- A 1.50×10^{-2}
- B 1.51×10^{-2}
- C 1.50×10^{-3}
- D 1.51×10^{-3}

SULIT

- 4 Find the value K for $25_8 + 110111_2 = K_{10}$

Cari nilai K untuk $25_8 + 110111_2 = K_{10}$

A 34

B 55

C 76

D 92

- 5 $1101111_2 - 111001_2 = s0t_5$

Find the value of s and of t.

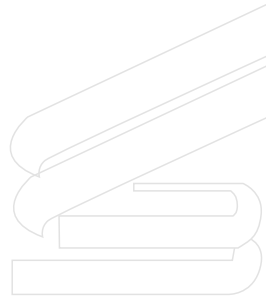
Cari nilai s dan nilai t.

A $s = 2$ dan $t = 4$

B $s = 4$ dan $t = 2$

C $s = 2$ dan $t = 2$

D $s = 4$ dan $t = 4$



YAYASAN
PAHANG

SULIT

- 6 Diagram 1 shows PR and PQ are the tangents to the circle with centre O. Given that $OR = 4\text{cm}$.

Rajah 1 menunjukkan PR dan PQ adalah tangen kepada suatu bulatan yang berpusat di O. Diberi bahawa $OR = 4\text{cm}$

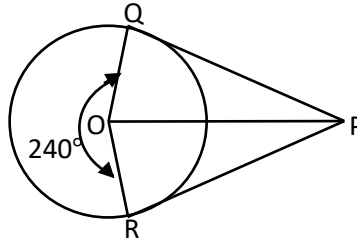


Diagram 1/Rajah 1

Find the length of PQ.

Cari panjang PQ.

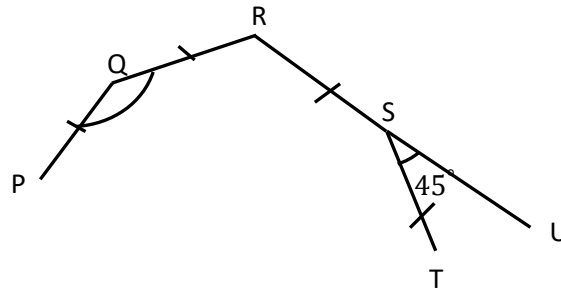
- A 3.46
- B 4.62
- C 6.93
- D 8.94



SULIT

- 7 In the diagram, P , Q , R , S and T are the vertices of a regular polygon .RSU is a straight line.

Dalam rajah di bawah, P , Q , R , S dan T ialah bucu bagi sebuah poligon sekata. RSU ialah garis lurus.



Name the polygon above.

Namakan poligon di atas

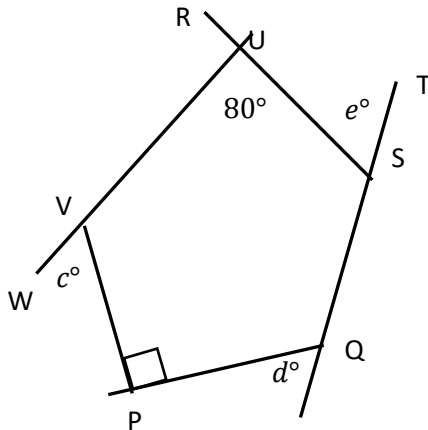
- A Pentagon
- B Heksagon
- C Heptagon
- D Oktagon



SULIT

- 8 In the diagram, PQSUV is an irregular pentagon, UVW, RUS and TSQ are straight line.

Dalam rajah, PQSUV ialah pentagon tak sekata, UVW, RUS dan TSQ ialah garis lurus.



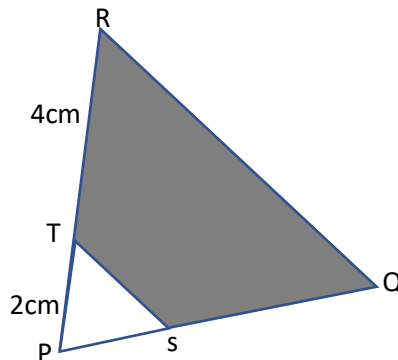
Determine the value of $c + d + e$

Tentukan nilai bagi $c + d + e$

- A 150
B 170
C 190
D 210

- 9 In the diagram ΔPQR is the image of ΔPST under an enlargement at centre P. It is given that area ΔPST is 14cm^2 .

Dalam rajah, ΔPQR ialah imej bagi ΔPST di bawah pembesaran pada pusat P. Diberi luas ΔPST ialah 14cm^2 .



SULIT

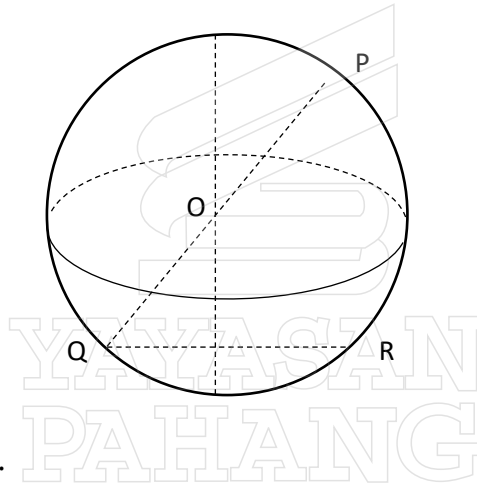
Find the area, in cm^2 , of quadrilateral TSQR.

Cari luas, dalam cm^2 , sisi empat TSQR.

- A 126
- B 112
- C 56
- D 28

- 10 In Diagram 10, N is the North Pole and S is the South Pole. The location of point P ($70^\circ N$, $120^\circ E$) and POQ is a diameter of the Earth. QR is the diameter of common latitude.

Dalam Rajah 10, U ialah Kutub Utara dan S ialah Kutub Selatan. Kedudukan titik P ialah ($70^\circ U$, $120^\circ T$) dan POQ ialah diameter Bumi. QR ialah diameter untuk latitud.



Find the location of R.

Cari lokasi R.

- A ($40^\circ S$, $120^\circ E/T$)
- B ($50^\circ S$, $120^\circ E/T$)
- C ($60^\circ S$, $120^\circ E/T$)
- D ($70^\circ S$, $120^\circ E/T$)

SULIT

- 11 Diagram 7 shows a right prism with a horizontal base PQRS. Trapezium TUQP is the uniform cross-section of the prism.

Rajah 7 menunjukkan sebuah prisma tegak dengan tapak mengufuk PQRS. Trapezium TUQP ialah keratan rentas seragam prisma itu.

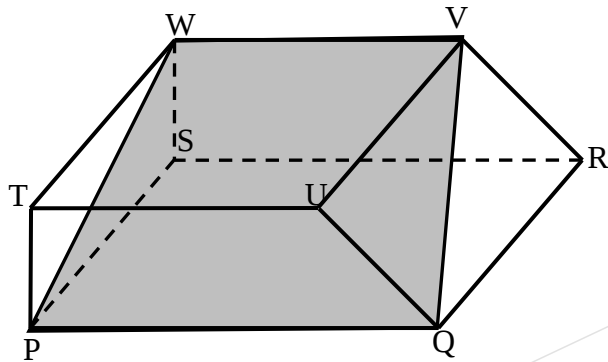


Diagram 7

Rajah 7

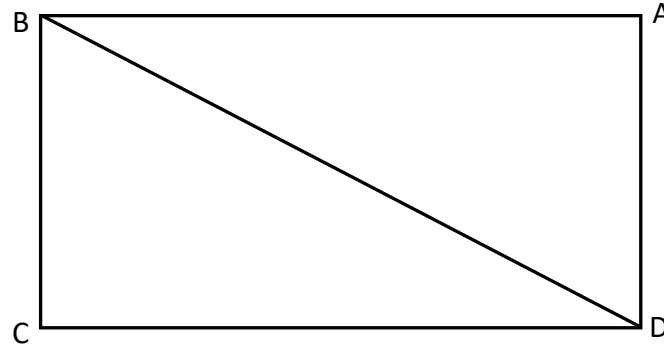
Name the angle between the plane PWVQ and the plane TUQP.

Namakan sudut di antarasatah PWVQ dengan satah TUQP.

- A $\angle WSP$
- B $\angle WPT$
- C $\angle VGU$
- D $\angle VGR$

SULIT

- 12 Diagram 8 shows a rectangle
Rajah 8, menunjukkan sebuah sisi empat tepat.

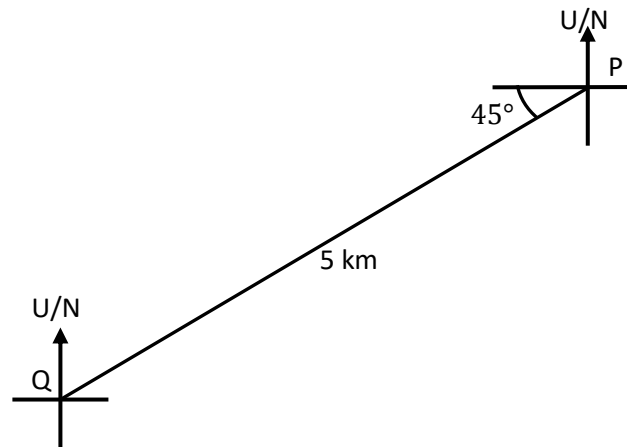


Which of the following statements is true?
Antara pernyataan berikut, yang manakah adalah benar?

- A $\angle CBD$ is an angle of elevation of B from D.
 $\angle CBD$ ialah sudut dongakan B dari D.
- B $\angle ABD$ is an angle of depression of B from D.
 $\angle ABD$ ialah sudut tunduk B dari D.
- C $\angle BDC$ is an angle of elevation of B from D.
 $\angle BDC$ ialah sudut dongakan B dari D.
- D $\angle CBD$ is an angle of depression of D from B.
 $\angle CBD$ ialah sudut tunduk D dari B.

SULIT

- 13 The diagram 9, shows the positions of P and Q on a horizontal plane.
Rajah 9, menunjukkan kedudukan P dan Q pada suatu satah mengufuk.

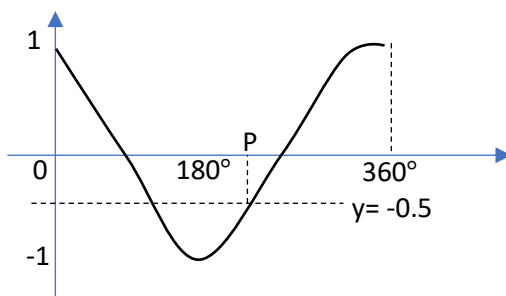


Akim moves from Q to R at a bearing of 120° . R lies due south of P. Calculate the distance, in km, between Q and R.

Akim bergerak dari Q ke R pada bearing 120° . R terletak ke selatan P. Hitung jarak, dalam km, antara Q dengan R.

- A 4.08
 B 4.47
 C 5.77
 D 7.07

- 14 Diagram 4 shows the graph of $y = \cos x$.
Rajah 4 menunjukkan graf $y = \cos x$.



Find the value of p is

Nilai p ialah

- A 210
 B 240
 C 300
 D 330

SULIT

15 $4(x - 2)^2 - (x^2 + 6x - 7)$

$$4(x - 2)^2 - (x^2 + 6x - 7)$$

A $3x^2 - 10x - 9$

B $3x^2 - 10x + 23$

C $3x^2 - 22x - 9$

D $3x^2 - 22x + 23$

16 Given $2k(\sqrt{q} - r) = 4r$, express q in term of k and r .

Diberi $2k(\sqrt{q} - r) = 4r$, ungkapkan q dalam sebutan k dan r .

A $q = \left(\frac{2r}{k} + r\right)^2$

B $q = \left(\frac{2r}{k} - r\right)^2$

C $q = \sqrt{\left(\frac{2r}{k} - r\right)^2}$

D $q = \left(\frac{r}{k}\right)^2$

SULIT

- 17 Given that $(2q^2 + pq) \times \frac{p^3}{q^2(p+2q)} = \frac{p^n}{q^m}$. Which of the following is true about the value n and m .

Diberi bahawa $(2q^2 + pq) \times \frac{p^3}{q^2(p+2q)} = \frac{p^n}{q^m}$. Antara berikut, yang manakah benar tentang nilai n dan m ?

	n	m
A	3	-1
B	3	1
C	-1	3
D	1	3

- 18 Current age for a man is 5 times the age of his child. Four years ago, the product of their age was 52. What is their current age?

Usia semasa seorang lelaki ialah 5 kali usia anaknya. Empat tahun yang lepas, hasil darab usia mereka adalah 52. Berapakah usia semasa mereka?

- A 10
B 36
C 44
D 52

SULIT

- 19 Kamal kicks a ball toward a goal. The height, h in meter, of the ball at time t seconds after the ball is kicked is $h = -x^2 - 2x + 35$. When does the ball hit the ground?

Kamal menendang sebuah bola ke arah sebuah gol. Ketinggian, h , dalam meter, bola itu pada masa t saat selepas ditendang ialah $h = -t^2 - 2t + 35$. Bilakah bola itu tiba di permukaan tanah.

- A 5
- B -7
- C -5
- D 7

- 20 Given matrix $G = \begin{pmatrix} -1 & 4 & 6 \\ 9 & 7 & -4 \\ 2 & 3 & -8 \end{pmatrix}$. State element of q_{23} .

Diberi matriks $G = \begin{pmatrix} -1 & 4 & 6 \\ 9 & 7 & -4 \\ 2 & 3 & -8 \end{pmatrix}$. Nyatakan unsur bagi q_{23} .

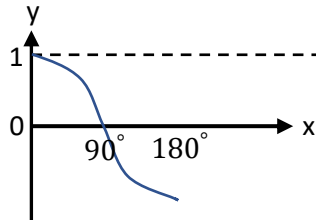
- A 3
- B -4
- C -8
- D No element / tiada unsur

SULIT

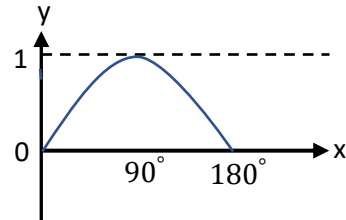
- 21 Which of the following graphs represents $y = \sin x$ for $0^\circ \leq x \leq 180^\circ$?

Antara graf berikut, yang manakah mewakili $y = \sin x$ bagi $0^\circ \leq x \leq 180^\circ$?

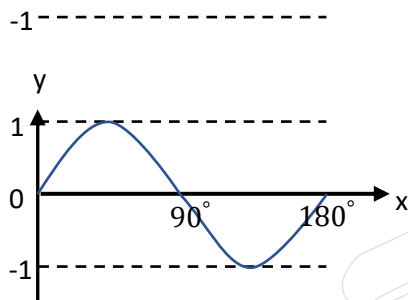
A



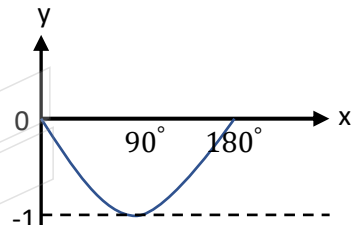
C



B



D



- 22 Simplify:

Permudahkan:

$$\left[\frac{p^8 \times (9q^{10})^{\frac{1}{2}}}{(p^{24}q^{16})^{\frac{1}{4}}} \right]^4$$

- A $3p^8q^4$
 B $81p^8q^4$
 C $12p^4q^8$
 D $81p^4q^8$

SULIT

23 Find the solution for $8 - \frac{x}{4} \geq 12 + \frac{x}{12}$

- A $x \leq 4$
- B $x \leq -12$
- C $x \leq 48$
- D $x \leq -48$

24 Diagram 18 shows a few of number cards

Rajah 18 menunjukkan beberapa keping kad bernombor



A card is chosen at random. Find the probability that the chosen card is a multiple of 3.

Sekeping kad dipilih secara rawak. Cari kebarangkalian bahawa kad yang dipilih ialah kad nombor gandaan 3

- A $\frac{1}{6}$
- B $\frac{1}{3}$
- C $\frac{1}{2}$
- D $\frac{2}{3}$

SULIT

- 25 The diagram show a set of data where q represents an integer.

Rajah di bawah menunjukkan satu set data dengan keadaan q mewakili satu integer.

11 , 17 , q , 11 , q , 11

The mode for the data is 11 and the median is 13. Two new numbers 13 and 19, are added into the set of data. Calculate the median for the new data.

Mod bagi data itu ialah 11 dan median ialah 13. Dua nombor baharu, 13 dan 19 ditambah ke dalam kumpulan data baharu itu. Hitung median bagi data baharu itu.

- A 13
- B 14
- C 15
- D 16
- 26 Diagram 5 a pie chart showing the distribution of grades obtained by workers in a test.
Rajah 5 ialah carta pai yang menunjukkan taburan gred yang diperolehi pekerja dalam satu ujian.

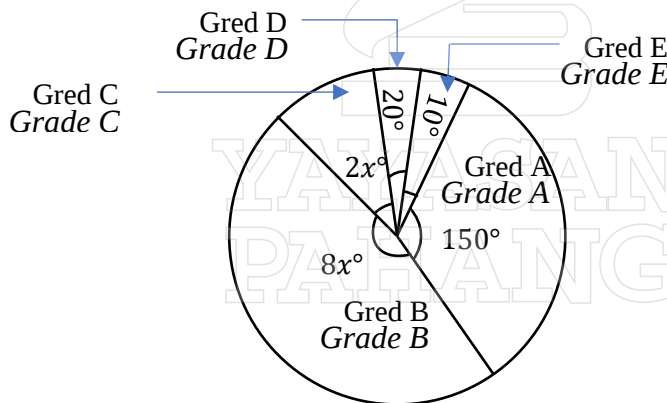


Diagram /Rajah

Given that the total number of working is 1340, find the number of working that obtained grade B.

Diberi bahawa jumlah pekerja ialah 1340 orang, cari bilangan pekerja yang memperolehi gred B.

- A 18
- B 36
- C 144
- D 536

SULIT

- 27 The diagram shows five Mathematics test score for three student , Aina, Bala ,Yap and Aniq.

Rajah di bawah menunjukkan lima markah ujian Matematik bagi tiga orang murid, Aina, Bala, Yap , Aniq.

Aina : 70,89,72,88,93

Bala : 80,75,76,90,83

Yap : 74,80,91,78,85

Aniq : 80,75,80,90,79

A student will be selected to represent the school for Mathematics quiz competition. Who is more suitable to be selected?

Seorang murid akan dipilih sebagai wakil sekolah untuk satu pertandingan kuiz matematik. Siapakah yang lebih sesuai untuk di pilih?

A Aina

B Bala

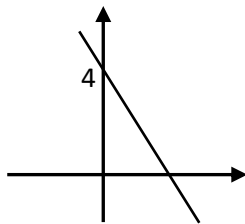
C Yap

D Aniq

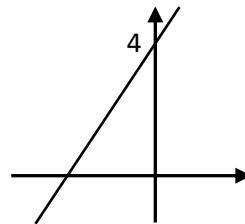
- 28 Which of the following graph represents $2y + 6x = 8$?

Antara graf berikut, yang manakah mewakili $2y + 6x = 8$?

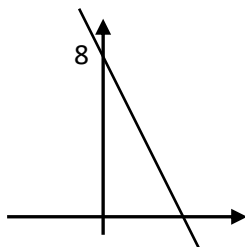
A



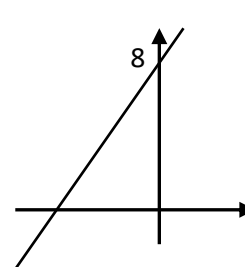
C



B



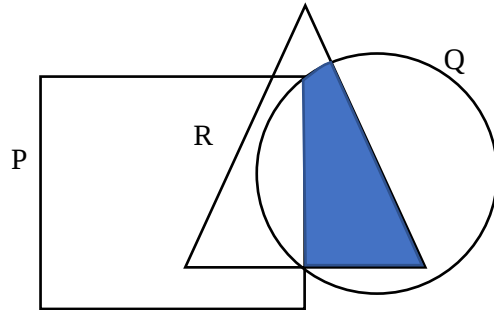
D



SULIT

- 29 Diagram 4 is a Venn diagram showing set P, set Q and set R such that the universal set $\xi = P \cup Q \cup R$.

Rajah 4 ialah gambarajah Venn yang menunjukkan set P, set Q dan set R dengan keadaan set semesta $= P \cup Q \cup R$.



Which of the following represents the shaded region?

Antara yang berikut, yang manakah mewakili kawasan yang berlorek?

- A $(R \cap Q) \cap P'$
- B $(R \cup Q) \cup P'$
- C $(R \cap Q) \cup P'$
- D $(R \cup Q) \cap P'$



SULIT

30 Table 3 shows the game chosen by 66 students.

Jadual 3 menunjukkan permainan yang telah dipilih oleh 66 orang murid.

Game Permainan	Hockey Hoki	Football Bola Sepak	Rugby Ragbi	Football and Rugby Bola Sepak dan Ragbi	Hockey and Rugby Hoki dan Rabgi	Hockey only Hoki sahaja	Rugby Only Ragbi sahaja
Bilangan murid	30	40	35	15	14	8	4

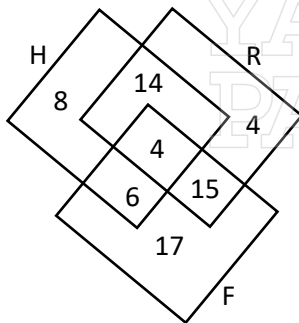
Table 2/Jadual 2

It is given that set $H = \{\text{students who chose hockey}\}$, set $R = \{\text{students who chose rubgi}\}$ and set $F = \{\text{students who chose rugby}\}$. Which of the following Venn diagram represents the information in Table 2.

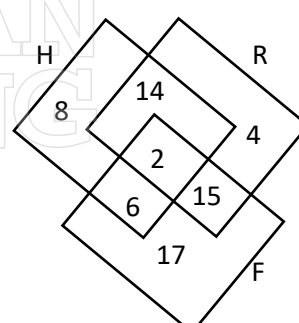
Diberi bahawa set $H = \{\text{murid memilih hoki}\}$, set $R = \{\text{murid memilih ragbi}\}$ dan set $F = \{\text{murid memilih bola sepak}\}$.

Antara berikut, gambar rajah Venn manakah yang mewakili maklumat dalam jadual 2?

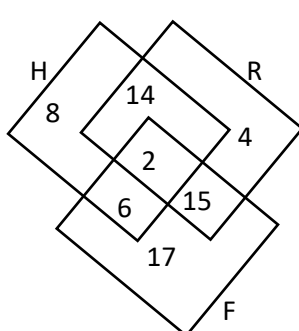
A



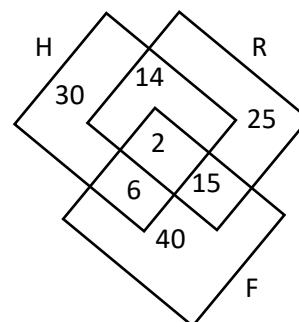
C



B



D



SULIT

31 Given

Diberi

$$\xi = A \cup B \cup C$$

$$A = \{1, 2, 3, 4\}$$

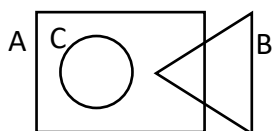
$$B = \{4, 5\}$$

$$C = \{3, 4, 5, 6, 7\}$$

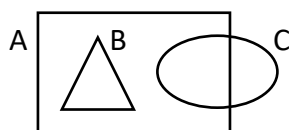
Which of the following Venn diagram best describes the above information?

Gambar rajah Venn manakah yang paling baik menggambarkan maklumat di atas?

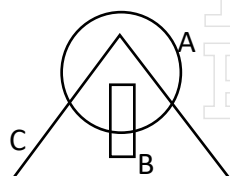
A



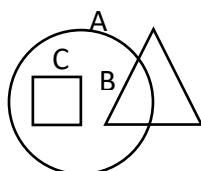
B



C



D

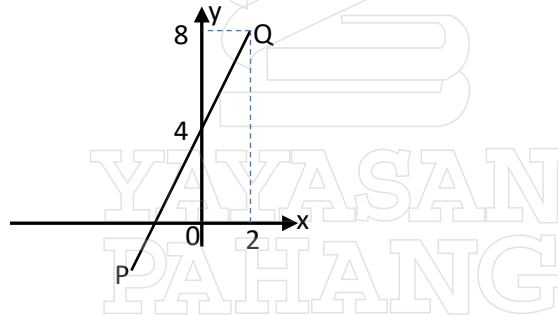


SULIT

- 32 Given two straight line which is $2y = (-4+10m)x + 3$ and $y = (4m - 1)x + 7$.
 Diberi dua garis lurus iaitu $2y = (-4+10m)x + 3$ dan $y = (4m - 1)x + 7$.
 Find the value of m and the x-intercept of the straight line $y = (4m - 1)x + 7$,
 if both straight line are parallel.

Cari nilai m dan pintasan-x bagi garis lurus $y = (4m - 1)x + 7$,
 jika kedua-dua garis lurus itu adalah selari.

- A $m = -\frac{1}{2}$, pintasan-x = 3
- B $m = \frac{1}{2}$, pintasan-x = -3
- C $m = \frac{1}{2}$, pintasan-x = -7
- D $m = -\frac{1}{2}$, pintasan-x = 7
- 33 In diagram 3, PQ is straight line drawn on a Cartesian plane.
 Dalam rajah 3, PQ ialah satu garis lurus yang dilukis pada suatu satah Cartes.



Find the x-intercept of PQ.

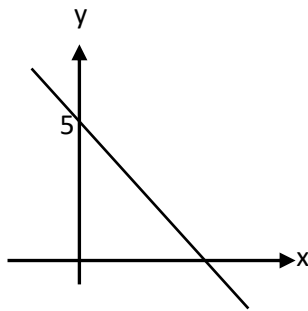
Cari pintasan-x bagi PQ.

- A 2
- B 4
- C -2
- D -4

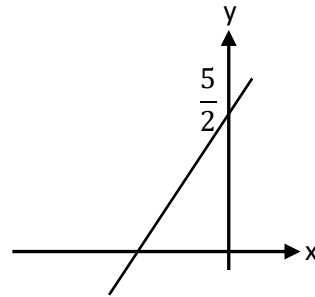
SULIT

34 Which of the following graphs represents $2y + 4x = 5$

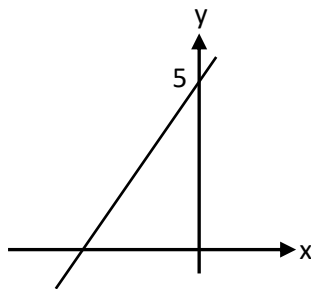
A



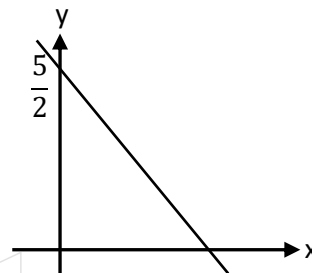
C



B



D



- 35 A lucky draw is to be held in a store to celebrate its 15th anniversary. There are 100 female customers, 200 male customers and 150 children who applied to take part. Each female customer's name is placed in the box 3 times, each male customer's name is 1 time and each children's name is 2 times. What is the probability that a female customer will be chosen?

Satu cabutan bertuah akan diadakan di sebuah pasaraya sempena sambutan ulangtahun ke-15 pasaraya berkenaan. Terdapat 100 orang pelanggan wanita, 200 orang pelanggan lelaki dan 150 orang kanak-kanak memohon untuk mengambil bahagian. Nama bagi setiap pelanggan wanita diletakkan sebanyak 3 kali di dalam kotak cabutan, nama bagi setiap pelanggan lelaki adalah sebanyak sekali dan nama bagi kanak-kanak adalah sebanyak 2 kali. Apakah kebarangkalian bahawa pelanggan wanita terpilih?

- A $\frac{1}{8}$
 B $\frac{2}{9}$
 C $\frac{2}{7}$
 D $\frac{3}{8}$

SULIT

- 36 In a group of students, 24 of them are boys. A student is chosen at random. The probability that the chosen student is a boy is $\frac{2}{5}$. Find the number of female students in that group.

Dalam sekumpulan murid , 24 daripada mereka ialah lelaki. Seorang murid dipilih secara rawak daripada kumpulan itu.Kebarangkalian bahawa murid lelaki terpilih ialah $\frac{2}{5}$. Cari bilangan murid perempuan dalam kumpulan itu.

- A 3
B 12
C 24
D 36

- 37 Given W varies directly with x and varies inversely with cube root of y. The table below shows the values of W, X and Y.

Diberi W berubah secara langsung dengan x dan secara songsang dengan punca kuasa tiga Y. Jadual di bawah menunjukkan nilai W, X dan Y.

W	X	Y
15	2	P
10	2	27

Find the value p.

Hitung nilai p.

- A 2
B 8
C 15
D 30

SULIT

- 38 Given y varies inversely as the cube of x and $y = 3$ when $x = 2$. Calculate the value of y when $x = 4$

*Diberi y berubah secara songsang dengan kuasa tiga x dan $y = 3$ apabila $x = 2$.
Hitungkan nilai y apabila $x = 4$*

- A 6
B 24
C $\frac{3}{4}$
D $\frac{3}{8}$

- 39 It is given that M is 2×2 matrix and $M^{-1} = \frac{1}{(-2)(4) - (-4)(5)} \begin{pmatrix} 4 & P \\ 4 & q \end{pmatrix}$
Find the value of p and of q .

*Diberi bahawa M ialah matrik 2×2 dan $M^{-1} = \frac{1}{(-2)(4) - (-4)(5)} \begin{pmatrix} 4 & P \\ 4 & q \end{pmatrix}$
Cari nilai p dan nilai q .*

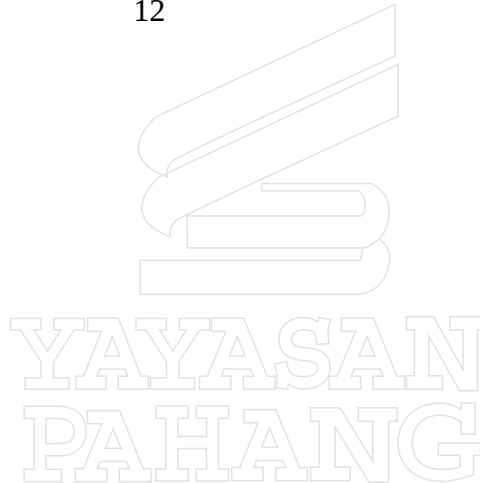
- A $p = -5$ $q = -2$
B $p = 5$ $q = 2$
C $p = -5$ $q = 2$
D $p = 5$ $q = -2$

SULIT

40 Given $3 \begin{pmatrix} m & -3 \\ 4 & 5 \end{pmatrix} - \frac{2}{3} \begin{pmatrix} -3 & 6 \\ n & 9 \end{pmatrix} = \begin{pmatrix} 7 & -5 \\ 4 & 21 \end{pmatrix}$, find the value of m and n

Diberi $3 \begin{pmatrix} m & -3 \\ 4 & 5 \end{pmatrix} - \frac{2}{3} \begin{pmatrix} -3 & 6 \\ n & 9 \end{pmatrix} = \begin{pmatrix} 7 & -5 \\ 4 & 21 \end{pmatrix}$, cari nilai m dan nilai n .

	m	n
A	3	-12
B	$\frac{7}{5}$	$\frac{9}{3}$
C	-3	4
D	$\frac{5}{3}$	12



SULIT

**INFORMATIONS 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 baru.

6. The diagrams in the questions provided are not drawn to scale unless stated.

Rajah yang mengiringi soalan tidak dilukis mengikut skala kecuali dinyatakan.

7. A list of formulae is provided on pages 2 to 4.

Satu senarai rumus disediakan di halaman 2 hingga 4.

8. You may use a scientific calculator.

Anda dibenarkan menggunakan kalkulator saintifik.

SULIT



SULIT