

1449/1
Matematik
Kertas 1
Sept 2020
 $1\frac{1}{4}$ jam



MODUL ULANGKAJI KECEMERLANGAN BERFOKUS SPM 2020
SET 1

MATEMATIK

Kertas 1
Satu jam lima belas minit

JANGAN BUKA MODUL INI SEHINGGA DIBERITAHU

1. Modul ini mengandungi 40 soalan dalam dwibahasa.
2. Jawab semua soalan.
3. Rajah yang mengiringi soalan tidak dilukis mengikut skala kecuali dinyatakan.
4. Satu senarai rumus disediakan di halaman 2 dan 3.
5. Anda dibenarkan menggunakan kalkulator saintifik.

Modul ini mengandungi 21 halaman bercetak.

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

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

RELATIONS / PERKAITAN

- | | | | |
|----|---|----|--|
| 1 | $a^m \times a^n = a^{m+n}$ | 12 | Pythagoras Theorem / <i>Teorem Pythagoras</i>
$c^2 = a^2 + b^2$ |
| 2 | $a^m \div a^n = a^{m-n}$ | | |
| 3 | $(a^m)^n = a^{mn}$ | 13 | $m = \frac{y_2 - y_1}{x_2 - x_1}$ |
| 4 | $A^{-1} = \frac{1}{ad-bc} \begin{pmatrix} d & -b \\ -c & a \end{pmatrix}$ | 14 | $m = -\frac{\text{y-intercept}}{\text{x-intercept}}$
$m = -\frac{\text{pintasan-y}}{\text{pintasan-x}}$ |
| 5 | $P(A) = \frac{n(A)}{n(S)}$ | | |
| 6 | $P(A') = 1 - P(A)$ | | |
| 7 | Distance / <i>Jarak</i> = $\sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$ | | |
| 8 | Midpoint / <i>Titik tengah</i> $(x, y) = \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$ | | |
| 9 | Average speed = $\frac{\text{distance travelled}}{\text{time taken}}$ | | <i>Purata laju</i> = $\frac{\text{jarak yang dilalui}}{\text{masa yang diambil}}$ |
| 10 | Mean = $\frac{\text{sum of data}}{\text{number of data}}$ | | <i>Min</i> = $\frac{\text{hasil tambah nilai data}}{\text{bilangan data}}$ |
| 11 | Mean = $\frac{\text{sum of (class mark} \times \text{frequency)}}{\text{sum of frequencies}}$ | | |
| | <i>Min</i> = $\frac{\text{hasil tambah (nilai titik tengah kelas} \times \text{kekerapan)}}{\text{hasil tambah kekerapan}}$ | | |

SHAPES AND SPACE / BENTUK DAN RUANG

- 1 Area of trapezium = $\frac{1}{2} \times \text{sum of parallel sides} \times \text{height}$
Luas trapezium = $\frac{1}{2} \times \text{hasil tambah sisi selari} \times \text{tinggi}$
- 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 = $2\pi r h$*
- 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
Isipadu prisma tegak = luas keratan rentas $\times$ panjang
- 7 Volume of cylinder = $\pi r^2 h$ *Isipadu silinder = $\pi r^2 h$*
- 8 Volume of cone = $\frac{1}{3} \pi r^2 h$ *Isipadu kon = $\frac{1}{3} \pi r^2 h$*
- 9 Volume of sphere = $\frac{4}{3} \pi r^3$ *Isipadu sfera = $\frac{4}{3} \pi r^3$*
- 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 = $(n - 2) \times 180^\circ$
Hasil tambah sudut pedalaman poligon
- 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
$$\frac{\text{area of sector}}{\text{Area of circle}} = \frac{\text{angle subtended at centre}}{360^\circ}, \quad \frac{\text{luas sector}}{\text{luas bulatan}} = \frac{\text{sudut pusat}}{360^\circ}$$
- 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 = $k^2 \times \text{luas objek}$*

Answer **all** questions.

Jawab semua soalan.

1. Express 3.15×10^8 in a single number.

Ungkapkan 3.15×10^8 sebagai satu nombor tunggal.

- A 31 500 000 000
- B 3 150 000 000
- C 315 000 000
- D 31 500 000

2. $4.06 \times 10^5 + 120 \times 10^4 =$

- A 1.606×10^3
- B 1.606×10^4
- C 1.606×10^5
- D 1.606×10^6

3. The moon is 405,696 km from the Earth. Express the moon-Earth distance in standard form.

Bulan adalah sejauh 405,696 km daripada Bumi. Ungkapkan jarak bulan-Bumi dalam bentuk piawai.

- A 4.05×10^5
- B 4.06×10^5
- C 4.05×10^{-5}
- D 4.06×10^{-5}

4. Table 1 shows the diameters of some of the planets.

Jadual 1 menunjukkan diameter bagi sebilangan planet.

Name <i>Nama</i>	Mercury <i>Utarid</i>	Venus <i>Zuhrah</i>	Earth <i>Bumi</i>	Mars <i>Marikh</i>	Jupiter <i>Musytari</i>
Diameter (km) <i>Diameter (km)</i>	4879.4	12104	12742	6779	139820

Table 1

Jadual 1

Find the diameter difference, in km, between the largest and the smallest planets in Table 1.

Cari beza diameter, dalam km, antara planet terbesar dan terkecil dalam Jadual 1.

- A 1.330×10^5
- B 1.271×10^5
- C 1.277×10^5
- D 1.349×10^5

5. Given $1321_5 = (1 \times p^q) + (3 \times 25) + (2 \times 5) + (1 \times 5^0)$, state the values of p and q .
 Diberi $1321_5 = (1 \times p^q) + (3 \times 25) + (2 \times 5) + (1 \times 5^0)$, nyatakan nilai bagi p dan q .

- A** $p = 5, q = 3$
B $p = 3, q = 5$
C $p = 25, q = 3$
D $p = 125, q = 0$

6. State 147_8 as a number in base 2.
 Nyatakan 147_8 sebagai satu nombor dalam asas 2.

- A** 1100111_2
B 1010111_2
C 1001111_2
D 1110011_2

7. In Diagram 1, $PQRTUW$ is a regular hexagon. $STUV$ and SRQ are straight lines.
 Dalam Rajah 1, $PQRTUW$ ialah heksagon sekata. $STUV$ dan SRQ ialah garis lurus.

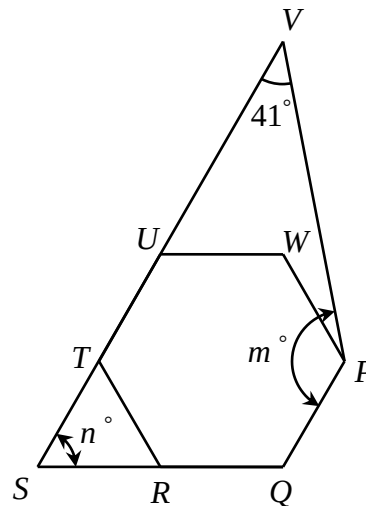


Diagram 1
 Rajah 1

Calculate the value of $m + n$.
 Hitung nilai bagi $m + n$.

- A** 140
B 169
C 199
D 219

8. In Diagram 2, $PQRS$ is a parallelogram. UPT and PRV are straight lines.
Dalam Rajah 2, $PQRS$ ialah segi empat selari. UPT dan PRV ialah garis lurus.

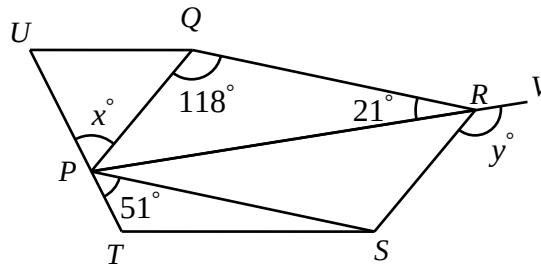


Diagram 2
 Rajah 2

Calculate the value of $y - x$.
Hitung nilai bagi $y - x$.

- A 62
 B 72
 C 108
 D 206
9. In Diagram 3, O is the centre of the circle. $PQRS$ is a trapezium. PNS , SMR , RLQ and PKQ are tangents to the circle at points N , M , L and K respectively.
Dalam Rajah 3, O ialah pusat bulatan. $PQRS$ ialah satu trapezium. PNS , SMR , RLQ dan PKQ masing-masing ialah tangen kepada bulatan itu pada titik-titik N , M , L dan K .

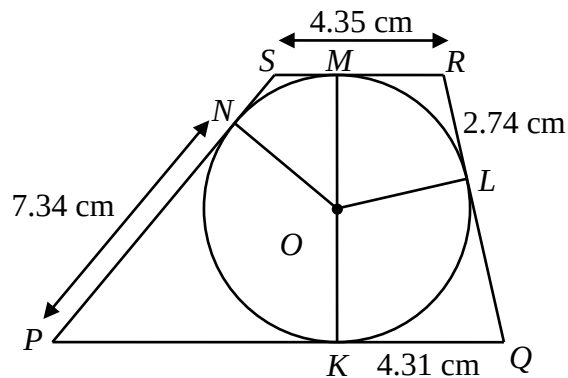


Diagram 3
 Rajah 3

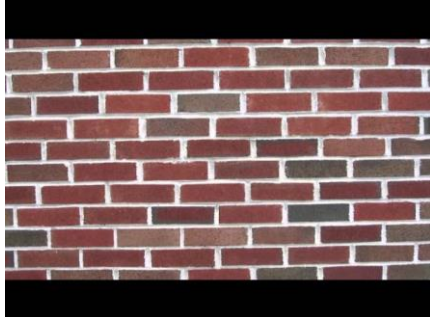
Calculate the perimeter, in cm, of the trapezium $PQRS$.
Hitung perimeter, dalam cm, bagi trapezium $PQRS$.

- A 18.74
 B 32.00
 C 33.13
 D 37.48

10. Which of the following real-life situations is **NOT** an example of isometric transformation?

*Antara contoh situasi kehidupan yang berikut, yang manakah **BUKAN** satu penjelmaan isometri?*

A



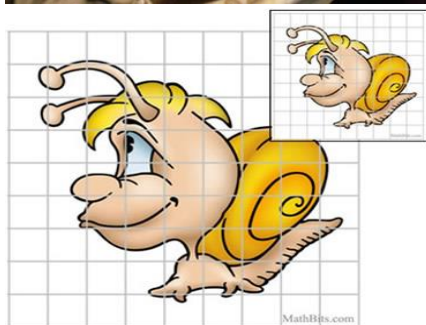
B



C

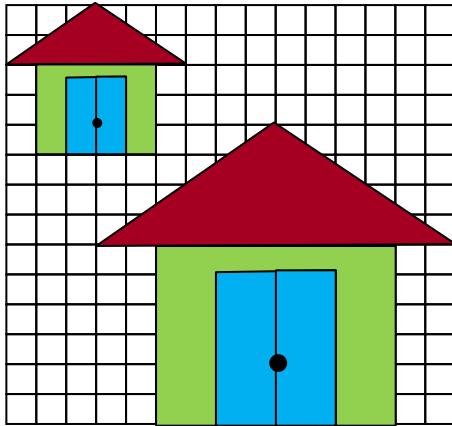


D

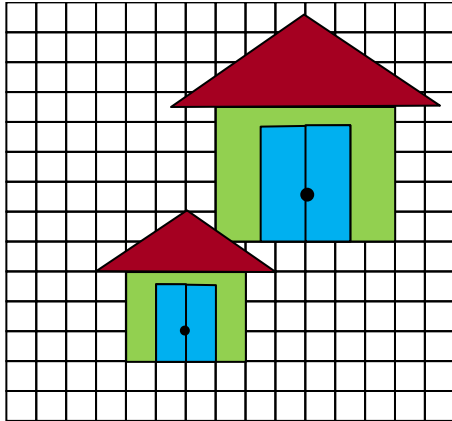


11. Which of the following scale factor of enlargements is a negative value?
Antara faktor skala pembesaran berikut, yang manakah bernilai negatif ?

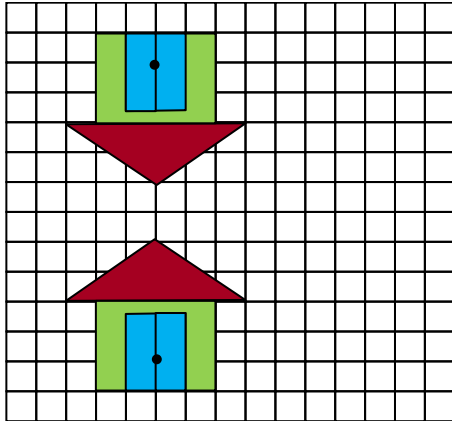
A



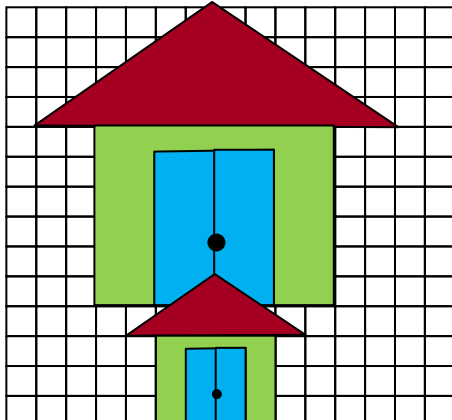
B



C



D



12. Diagram 4 shows a sinus graph with $y = q \sin px^\circ$, $0^\circ \leq x^\circ \leq 360^\circ$.
Rajah 4 menunjukkan suatu graf sinus dengan $y = q \sin px^\circ$, $0^\circ \leq x^\circ \leq 360^\circ$.

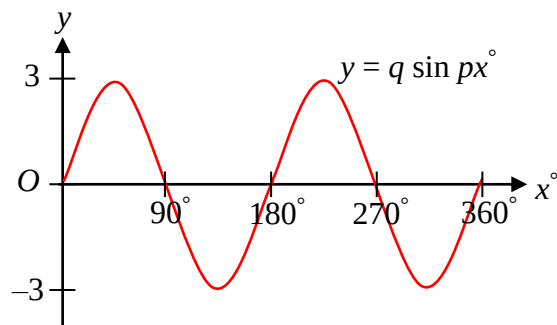


Diagram 4

Rajah 4

Given that p and q are constants, find the value of p and value of q .
Diberi p dan q adalah pemalar, cari nilai p dan nilai q .

- A** $p = 2, q = 3$
B $p = -2, q = -3$
C $p = -3, q = -2$
D $p = 3, q = 2$
13. Diagram 5 shows a unit circle.
Rajah 5 menunjukkan satu bulatan unit.

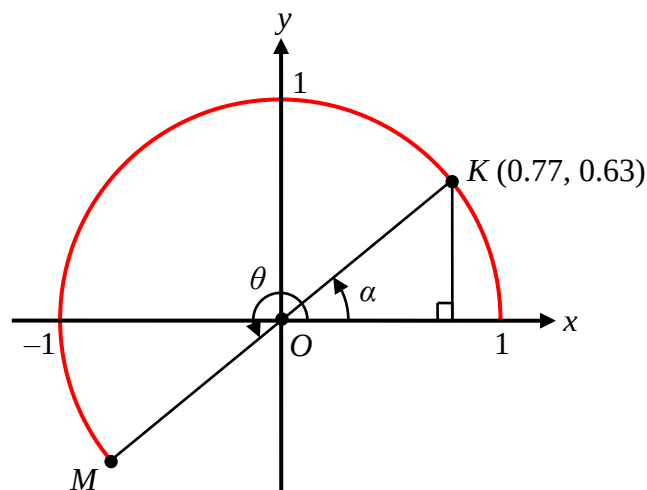


Diagram 5

Rajah 5

Find the value of $\sin \theta - \cos \theta$.
Cari nilai bagi $\sin \theta - \cos \theta$.

- A** 0.14
B 1.41
C -0.14
D -1.41

14. Diagram 6 shows a basketball player is at the free-throw line, which is 15 feet away from the centre of the basket rim. The basket rim and the eyes of the player are 10 feet and 6 feet above the horizontal floor respectively.

Rajah 6 menunjukkan seorang pemain bola keranjang berada di garisan lemparan bebas yang berjarak 15 kaki dari pusat rim bola. Rim bola dan aras mata pemain itu masing-masing berada setinggi 10 kaki dan 6 kaki di atas tanah mengufuk.

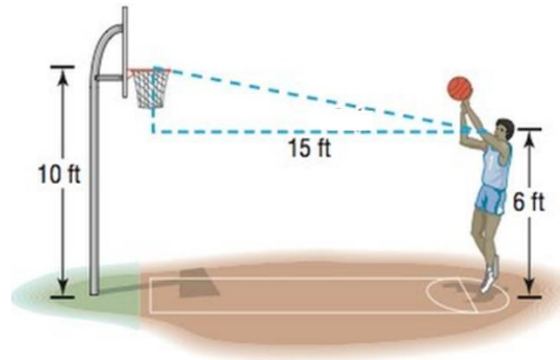


Diagram 6

Rajah 6

Calculate the angle of elevation of the centre of the rim from the player's eyes.

Hitung sudut dongakan pusat rim bola daripada mata pemain bola tersebut.

- A 14.93°
 B 21.80°
 C 33.69°
 D 75.07°
15. Diagram 7 shows a wheelchair ramp built for disabled people.
 Rajah 7 menunjukkan satu tanjakan kereta roda dibina untuk orang kurang upaya.

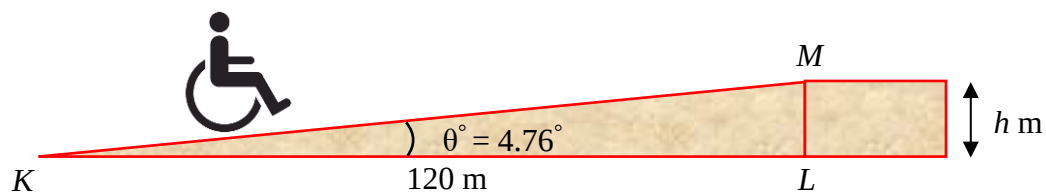


Diagram 7

Rajah 7

A wheelchair ramp is safe to use by disabled people if $\theta^\circ = 4.76^\circ$. Ai Ling succeed to do so. Find the vertical height, h , in m, taken by Ai Ling.

Sebuah tanjakan kereta roda yang selamat untuk kegunaan orang kurang upaya apabila $\theta^\circ = 4.76^\circ$. Ai Ling telah berjaya berbuat demikian.

Cari tinggi mencancang, h , dalam m, yang telah diambil oleh Ai Ling.

- A 0.040
 B 9.958
 C 9.992
 D 119.6

16. Diagram 8 is a net of a solid.

Rajah 8 menunjukkan sebuah bentangan suatu bongkah.

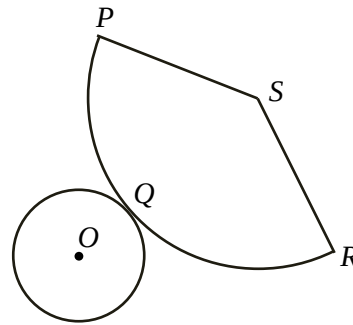


Diagram 8

Rajah 8

Given O is the centre of the circle and S is the centre of sector $SPQR$. The circle is the base of the solid.

Name the angle between the inclined curve plane and the horizontal plane of the solid.

Diberi O ialah pusat bulatan dan S ialah pusat sektor $SPQR$. Bulatan itu adalah tapak bongkah itu.

Namakan sudut antara satah melengkung condong dan satah mengufuk bagi bongkah itu.

- A** $\angle RSP$
- B** $\angle QSP$
- C** $\angle SQO$
- D** $\angle QRS$

17. Diagram 9 shows the location of three points at G , H and J . Point G lies due north of H .

Rajah 9 menunjukkan kedudukan tiga titik pada G , H dan J . Titik G berada ke utara H .

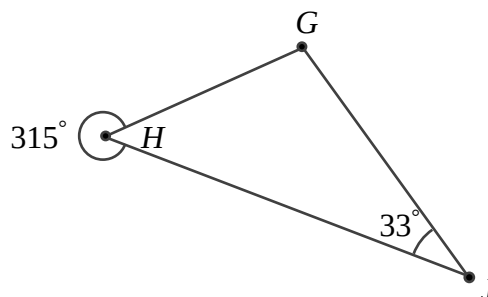


Diagram 9

Rajah 9

Find the bearing of G from J .

Cari bearing G dari J .

- A** 348°
- B** 213°
- C** 258°
- D** 282°

18. Diagram 10 shows a Malaysia map with longitudes and latitudes.

Rajah 10 menunjukkan satu peta Malaysia bersama longitude dan latitude.



Diagram 10

Rajah 10

Based on this Malaysia Map, find the possible location of Kuala Lumpur.

Berdasarkan peta Malaysia ini, cari lokasi yang mungkin bagi Kuala Lumpur.

- A (1.49° N, 103.74° E)
- B (3.14° N, 101.69° E)
- C (5.42° N, 100.33° E)
- D (5.98° N, 116.07° E)

19. $2(x^2 - 9) - (3x + 1)^2 =$

- A $-7x^2 - 6x - 19$
- B $-7x^2 + 6x - 17$
- C $7x^2 - 6x + 17$
- D $7x^2 + 6x + 19$

20. Express $\frac{5x}{q+n} \div \frac{5mn+xy}{n^2-q^2}$ as a single fraction in its simplest form.

Ungkapkan $\frac{5x}{q+n} \div \frac{5mn+xy}{n^2-q^2}$ sebagai satu pecahan tunggal dalam bentuk termudah.

- A** $\frac{5(q-n)}{mn+y}$
B $\frac{5(n-q)}{mn+y}$
C $\frac{5(n-q)}{mn+y}$
D $\frac{5(n-q)}{mn+xy}$

21. Given that $9r + 2k^2 = 18r$, express k in terms of r .

Diberi bahawa $9r + 2k^2 = 18r$, ungkapkan k dalam sebutan r .

- A** $3\sqrt{\frac{r}{2}}$
B $3\sqrt{\frac{r}{2}}$
C $9\sqrt{\frac{r}{2}}$
D $\frac{9\sqrt{r}}{2}$

22. Simplify :

Permudahkan :

$$\frac{p^4 \times (16p^8)^{\frac{1}{4}}}{q^{-3}}$$

- A** $2p^3q^{-3}$
B $2p^6q^3$
C $4p^3q^{-3}$
D $16p^6q^3$

23. Find the value of :

Cari nilai bagi :

$$\left(1\frac{2}{3} \times 3\frac{6}{7}\right)^{-1}$$

- A** $\frac{45}{7}$
B $\frac{7}{45}$
C $4\frac{5}{7}$
D $7\frac{4}{5}$

24. Diagram 11 shows a logo formed by 5 identical regular pentagons with side 7 cm.

Rajah 11 menunjukkan satu logo yang terbentuk daripada 5 pentagon sekata serupa yang bersisi 7 cm.

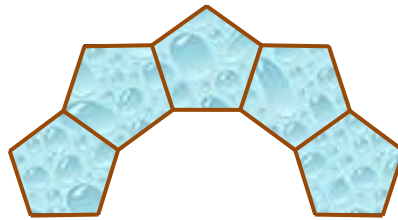


Diagram 11

Rajah 11

Calculate the perimeter, in cm, of the logo.

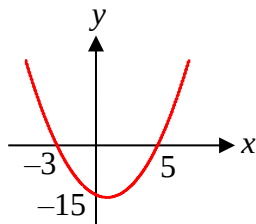
Hitung perimeter, dalam cm, bagi logo itu.

- A** 175
- B** 147
- C** 125
- D** 119

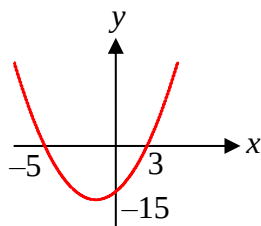
25. Which of the following graphs represents $y = (x + 5)(x - 3)$?

Antara graf berikut, yang manakah mewakili $y = (x + 5)(x - 3)$?

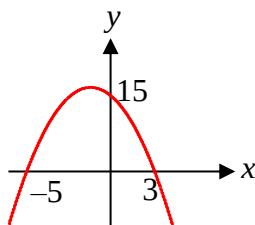
A



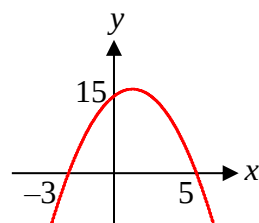
B



C



D



26. Diagram 12 shows a number line.

Rajah 12 menunjukkan satu garis lurus.

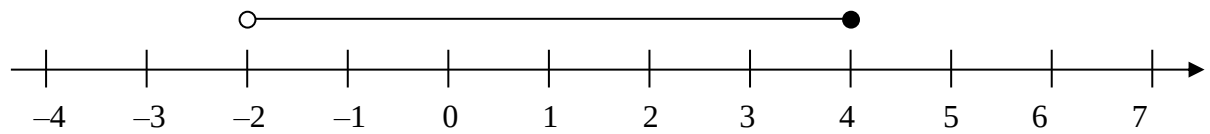


Diagram 12

Rajah 12

Which of the following simultaneous inequalities is the solution of the number line?

Antara ketaksamaan serentak berikut, yang manakah ialah penyelesaian bagi garis nombor itu?

- A** $-2 < 4x + 6$ and/ dan $3x < -x + 16$
B $-2 \leq 4x + 6$ and/ dan $3x < -x + 16$
C $-2 < 4x + 6$ and/ dan $3x \leq -x + 16$
D $-2 \leq 4x + 6$ and/ dan $3x \leq -x + 16$
27. $3x - 2 < 8$ and $5 < y \leq 12$ are two simultaneous linear inequalities where x and y are integers. Find the maximum value of $y - x$.
 $3x - 2 < 8$ dan $5 < y \leq 12$ adalah dua ketaksamaan linear serentak di mana x dan y ialah integer. Cari nilai maksimum bagi $y - x$.

- A** 5
B 7
C 9
D 15

28. Table 2 shows a cumulative frequency table for the T-shirt sizes of the students in a class.
Jadual 2 menunjukkan jadual kekerapan longgokan bagi saiz kemeja-T murid-murid dalam suatu kelas.

T-shirt Size Saiz Kemeja-T	S	M	L	XL	XXL
Cumulative Frequency Kekerapan longgokan	2	18	28	33	36

Table 2

Jadual 2

A number of T-shirts of new students are added to the data. The new mode of T-shirt size is **L**. Determine the minimum number of the new students.

*Sebilangan saiz kemeja-T murid baharu ditambah ke dalam data. Mod baharu saiz kemeja-T ialah **L**. Tentukan bilangan minimum murid baharu itu.*

- A** 5
B 6
C 7
D 8

29. Table 3 shows the results of a competition.

Jadual 3 menunjukkan keputusan bagi suatu pertandingan.

Score Skor	0	1	2	3	4
Frequency $\times$ score Kekerapan $\times$ skor	m	15	24	36	n

Table 3

Jadual 3

55 participants already took part in that competition, find the values of m and n .

55 peserta sudah mengambil bahagian dalam pertandingan itu, cari nilai bagi m dan n .

- A $m = 64, n = 0$
 B $m = 16, n = 4$
 C $m = 4, n = 16$
 D $m = 0, n = 64$

30. Diagram 13 is a pie chart of the distribution of Adam's income in March.

Rajah 13 ialah satu carta pai yang menunjukkan agihan pendapatan Adam pada bulan Mac.

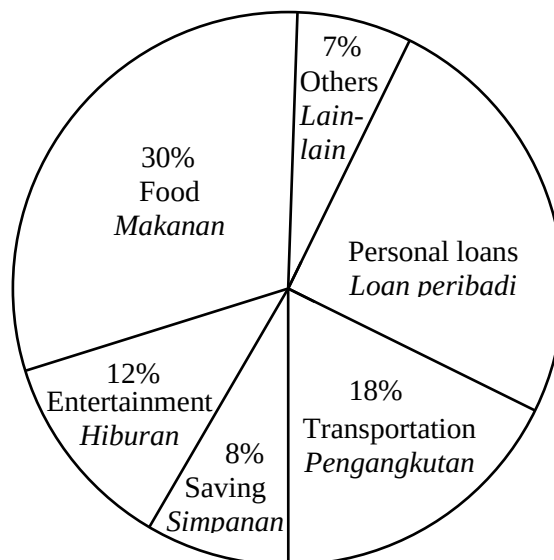


Diagram 13

Rajah 13

In April, Adam wants to increase 5% from his income as saving by reducing his expenses on entertainment.

Calculate Adam's expenses on entertainment in April, in RM, if his total income is RM3500.

Pada bulan April, Adam ingin menambah 5% daripada pendapatannya sebagai simpanan dengan mengurangkan perbelanjaan pada hiburan.

Hitung perbelanjaan Adam pada hiburan bagi bulan April, dalam RM, jika pendapatannya ialah RM3500.

- A 245
 B 420
 C 455
 D 1050

31. Diagram 14 shows an ogive of a group of students' weight.

Rajah 14 menunjukkan satu ogif bagi berat sekumpulan murid.

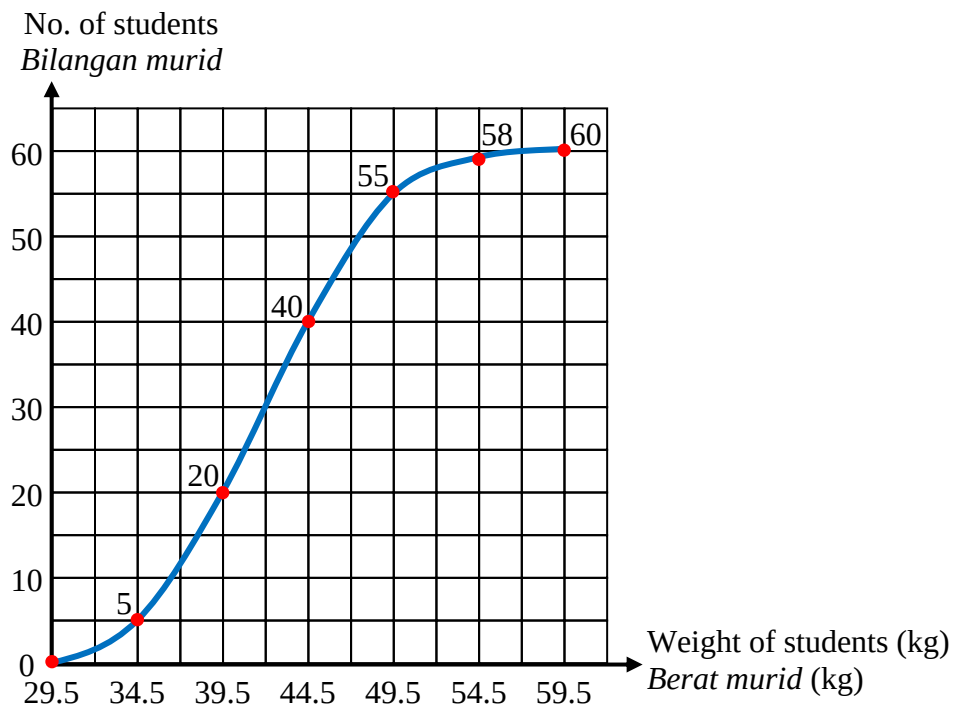


Diagram 14

Rajah 14

Which of the following is **false** ?

Antara berikut, yang manakah adalah **palsu** ?

- A** Estimated median weight of the students is 42 kg.
Anggaran median berat kumpulan murid ini adalah 42 kg.
- B** Modal class of this grouped data is 40 – 44 kg.
Kelas mod bagi data terkumpul ini adalah 40 – 44 kg.
- C** Number of students in this group is 238
Bilangan murid bagi kumpulan ini ialah 238.
- D** Number of students whose weight more than 44.5 kg is 20 students.
Bilangan murid yang melebihi 44.5 kg ialah seramai 20 murid.

32. Given that $\xi = \{x: 77 < x < 86\}$, $P = \{x: x \text{ is a multiple of } 4\}$,

$Q = \{x: x \text{ is a whole number such that when divided by } 5, \text{ the remainder is } 2\}$.

State the elements of $(P \cup Q)'$.

Diberi bahawa $\xi = \{x: 77 < x < 86\}$, $P = \{x: x \text{ ialah gandaan } 4\}$,

$Q = \{x: x \text{ ialah nombor bulat dengan keadaan apabila dibahagi } 5, \text{ bakinya ialah } 2\}$.

Nyatakan unsure bagi $(P \cup Q)'$.

- A** $\{77, 80, 82, 84, 86\}$
- B** $\{78, 79, 81, 83, 85\}$
- C** $\{80, 82, 84\}$
- D** $\{78, 79, 81\}$

33. Diagram 15 is a Venn diagram with the universal set ξ , set M , set C and set B .
Rajah 15 ialah gambarajah Venn dengan set semesta ξ , set M , set C dan set B .

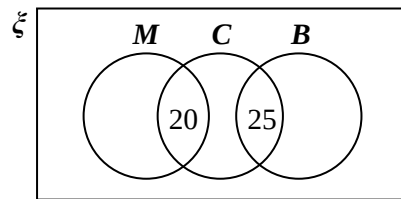


Diagram 15

Rajah 15

$M = \{\text{Mathematics Club Member}\}$, $C = \{\text{Chess Club Member}\}$,

$B = \{\text{Basketball Club Member}\}$.

$M = \{\text{Ahli Kelab Matematik}\}$, $C = \{\text{Ahli Kelab Catur}\}$,

$B = \{\text{Ahli Kelab Bola Keranjang}\}$.

Given $n(\xi) = 215$, $n(M) = 85$, $n(C) = 70$, $n(B) = 60$ and $n(M \cap C) = 20$.

Diberi $n(\xi) = 215$, $n(M) = 85$, $n(C) = 70$, $n(B) = 60$ dan $n(M \cap C) = 20$.

Find the difference between the number of students who are not involved in any of the club and the number of Mathematics Club's member only.

Cari beza antara bilangan murid yang tidak terlibat dalam mana-mana kelab dengan bilangan murid ahli Kelab Matematik sahaja.

- A** 45
- B** 65
- C** 100
- D** 110

34. Diagram 16 shows a straight line which intercepts the x -axis and y -axis on a Cartesian plane.

Rajah 16 menunjukkan suatu garis lurus yang memotong paksi- x dan paksi- y pada suatu satah Cartes.

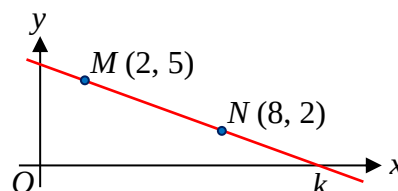


Diagram 16

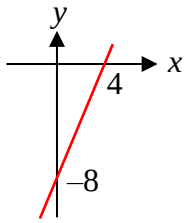
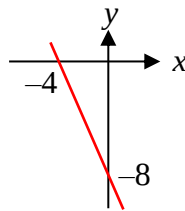
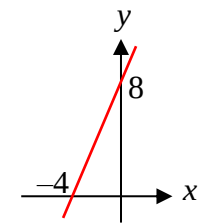
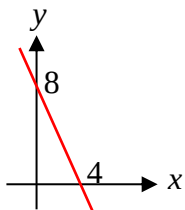
Rajah 16

Find the value of k .

Cari nilai bagi k .

- A** 10
- B** 12
- C** 14
- D** 16

35. Which of the following graph is parallel to $y = 2x - 8$?
Antara graf berikut, yang manakah mewakili $y = 2x - 8$?

A**B****C****D**

36. Table 4 shows the number of students who attend a Mathematics Programme.

Jadual 4 menunjukkan bilangan murid yang menghadiri satu Program Matematik.

Class/ Kelas	5T1	5T2	5T3
Gender/ Jantina			
Lelaki/ Boys	12	14	11
Girl/ Perempuan	10	9	13

Table 4

Jadual 4

A student is selected at random from the programme.

Find the probability that a girl from 5T2 is selected.

Seorang murid dipilih secara rawak daripada program tersebut.

Cari kebarangkalian bahawa seorang murid perempuan dari 5T2 dipilih.

- A** $\frac{3}{23}$
B $\frac{9}{23}$
C $\frac{10}{69}$
D $\frac{13}{69}$

37. A box contains 48 cups. There are blue cups and white cups. A cup is chosen at random from the box. The probability that a blue cup is chosen is $\frac{1}{6}$. How many blue cups need to be added to the box so that the probability that a blue cup is chosen is $\frac{1}{2}$?

Sebuah kotak mengandungi 48 cawan yang terdiri daripada cawan biru dan cawan putih. Sebiji cawan dipilih secara rawak dari kotak itu. Kebarangkalian sebiji cawan biru dipilih ialah $\frac{1}{6}$. Berapakah bilangan cawan biru yang perlu ditambah ke dalam kotak itu supaya kebarangkalian sebiji cawan biru dipilih ialah $\frac{1}{2}$?

- A** 8
B 16
C 24
D 32

38. The relation between p , n and r is $p \propto \frac{\sqrt[3]{n}}{r}$. Given that $p = 4$ when $n = 8$ and $r = 6$, calculate the value of p when $n = 64$ and $r = 3$.

Hubungan antara p , n dan r ialah $p \propto \frac{\sqrt[3]{n}}{r}$. Diberi bahawa $p = 4$ apabila $n = 8$ dan $r = 6$, hitung nilai p apabila $n = 64$ dan $r = 3$.

- A** 48
- B** 32
- C** 24
- D** 16

39. If the rate of interest is fixed, the amount of interest earned varies directly as the amount of principal invested and the duration the principal is invested.

Given that the interest earned from a year's investment of RM5000 is RM150.

Calculate the amount of principal, in RM, is needed to earn an interest of RM100 in 4 months at the same rate.

Jika kadar faedah ditetapkan, jumlah faedah diperolehi berkadar langsung dengan jumlah wang pokok dilaburkan dan tempoh wang pokok itu dilaburkan.

Diberi faedah diperolehi dari pelaburan setahun sebanyak RM5000 adalah RM150.

Hitung jumlah wang pokok, dalam RM, diperlukan untuk memperoleh faedah RM100 dalam 4 bulan pada kadar yang sama.

- A** 1500000
- B** 1000000
- C** 15000
- D** 10000

40. Find the value of h and of k in the following matrix equation;

Cari nilai h dan nilai k bagi persamaan matrik berikut :

$$\begin{pmatrix} h & 10 \\ 5 & 1 \end{pmatrix} - 2 \begin{pmatrix} 4 & 5 \\ 0 & -1 \end{pmatrix} = \begin{pmatrix} -12 & 0 \\ 5 & k \end{pmatrix}$$

- A** $h = -1, k = 1$
- B** $h = -3, k = 2$
- C** $h = -4, k = 3$
- D** $h = -8, k = 0$

QUESTION PAPER END
KERTAS SOALAN TAMAT