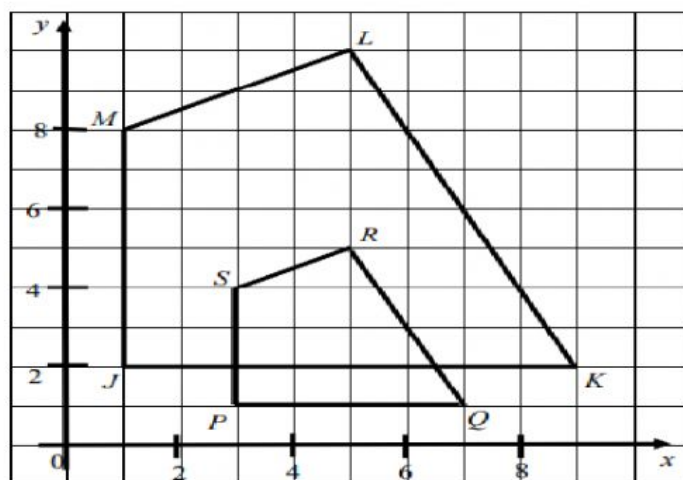


- 11 In Diagram 5, pentagon $PQRS$ is the image of pentagon $JKLM$ under an enlargement with scale factor k at point F .

Dalam Rajah 5, pentagon $PQRS$ ialah imej kepada pentagon $JKLM$ di bawah suatu pembesaran dengan faktor skala k pada pusat F .



State the value of k and coordinate of F .

Nyatakan nilai k dan koordinat titik F .

	F	k
A	(5, 0)	$-\frac{1}{2}$
B	(5, 5)	$-\frac{1}{2}$
C	(5, 0)	$\frac{1}{2}$
D	(5, 5)	$\frac{1}{2}$

- 12 Diagram 6 shows a triangle ACD .

Rajah 6 menunjukkan sebuah segi tiga ACD .

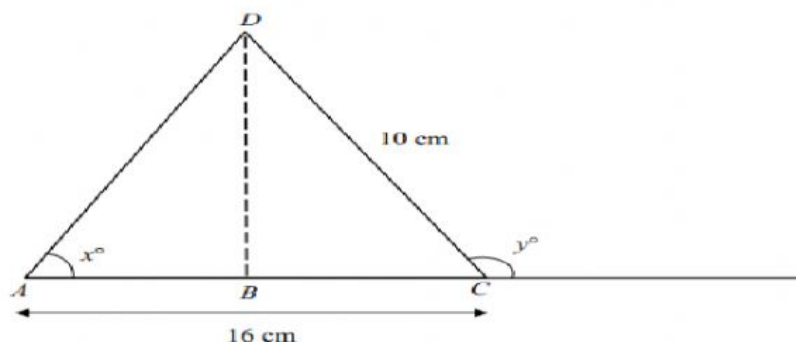


Diagram 6
Rajah 6

It is given that BD is the symmetrical axis of triangle ACD . B is the midpoint of the line AC . Find the value of $\cos x^\circ + \tan y^\circ$.

Diberi bahawa BD ialah paksi simetri bagi segitiga ACD . B ialah titik tengah AC .

Cari nilai $\cos x^\circ + \tan y^\circ$.

- A 0.05
- B 1.20
- C 1.35
- D 1.55

- 13 Diagram 7 shows a part of the graph $y = 2 \sin x$.
Rajah 7 menunjukkan sebahagian graf $y = 2 \sin x$.

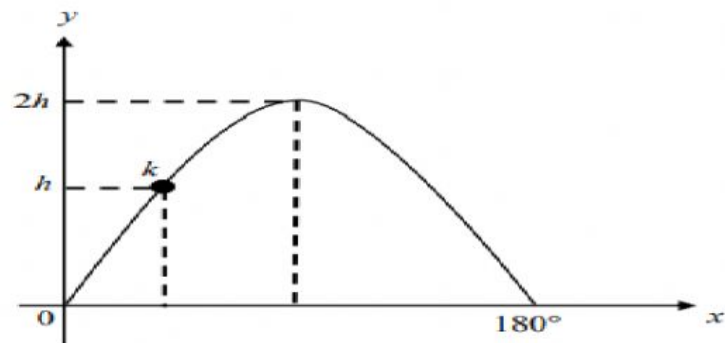


Diagram 7
Rajah 7

Find the coordinate of k .

Cari koordinat k .

- A $(30^\circ, 0.5)$
 - B $(30^\circ, 1)$
 - C $(45^\circ, 0.5)$
 - D $(45^\circ, 1)$
- 14 Diagram 8 shows a cuboid with horizontal base $PQRS$.
Rajah 8 menunjukkan sebuah kuboid dengan tapak mengufuk $PQRS$.

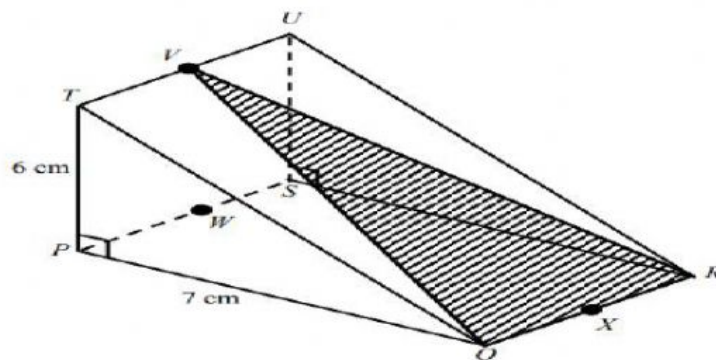


Diagram 8
Rajah 8

W , X and V are midpoints of PS , QR and TU .

Name the angle between the plane VQR and the base $PQRS$.

W , X dan V adalah titik tengah bagi PS , QR and TU .

Namakan sudut di antara satah VQR dan tapak $PQRS$.

- A $\angle VRS$
- B $\angle VPQ$
- C $\angle VXW$
- D $\angle VXP$

- 15 Diagram 9 shows a building and a flag pole. The depression angle of J from N is 17° .
Rajah 9 menunjukkan sebuah bangunan dan tiang bendera. Sudut tunduk J dari N ialah 17° .



Diagram 9
Rajah 9

Find the distance KL , in meters, from the flag pole to the building.
Carikan jarak KL , dalam meter, dari tiang bendera ke bangunan itu.

- A 49.06
 - B 51.30
 - C 65.42
 - D 114.47
- 16 In Diagram 10, P and S are points on a horizontal surface. PQR is a building. Given the elevation angle of Q from S is 38° and the elevation angle of point R from S is 55° .
Dalam Rajah 10, P dan S adalah titik – titik pada permukaan mengufuk. PQR ialah sebuah bangunan. Diberi sudut dongakan Q dari S ialah 38° dan sudut dongakan R dari S ialah 55° .

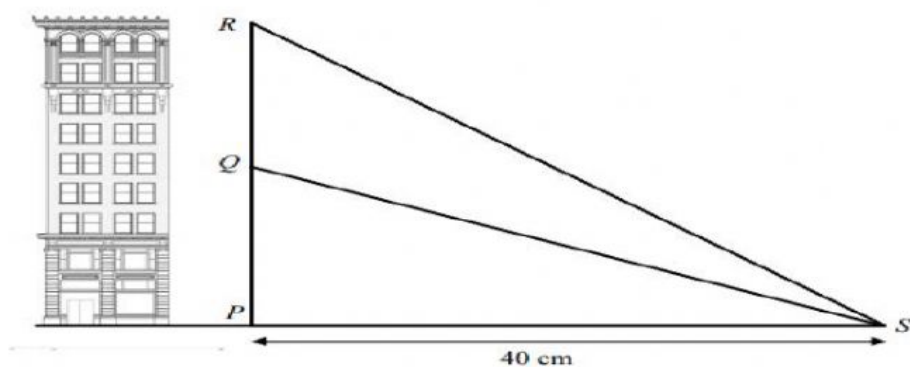


Diagram 10
Rajah 10

Calculate the height, in meter, of QR .

Hitung tinggi, dalam meter, bagi QR .

- A 8.14
- B 8.54
- C 25.88
- D 28.26

- 17 In Diagram 11, S , R and T are three points on a horizontal ground. R is due north of T .
 Dalam Rajah 11, S , R dan T adalah tiga titik di atas tanah mengufuk. R berada ke utara T .

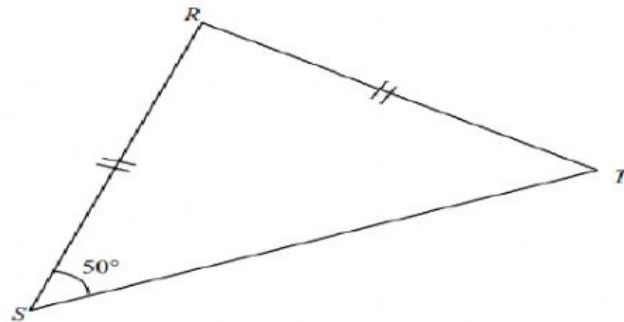


Diagram 11
Rajah 11

Find the bearing of S from R .

Cari bearing S dari R .

- A 100°
- B 160°
- C 260°

- 18 In Diagram 12, NOS is the axis of the earth and POQ is a diameter of the earth.
 Find the location of point P .

Dalam Rajah 12, NOS ialah paksi bumi dan POQ ialah diameter bumi.

Cari kedudukan titik P .

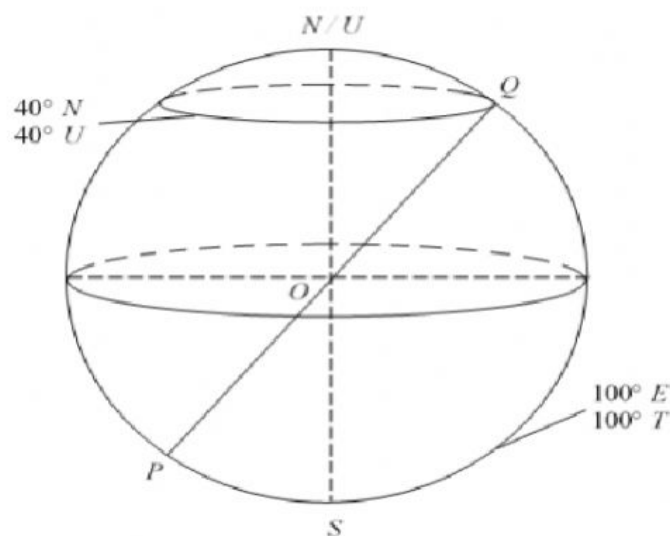


Diagram 12
Rajah 12

A $(40^\circ U, 100^\circ T)$

B $(40^\circ U, 80^\circ B)$

C $(40^\circ S, 100^\circ T)$

D $(40^\circ S, 80^\circ B)$

- 19** Simplify $(3x - 1)^2 - (4x - 1)$.
 Permudahkan $(3x - 1)^2 - (4x - 1)$.

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

B $9x^2 - 10x - 2$

C $9x^2 + 2x + 2$

D $9x^2 + 2x + 2$

- 20** Express $\frac{2ab - 4b}{9 - b^2} \div \frac{6ab}{3 - b}$ as a single fraction in its simplest form.

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

A $\frac{3a(3 - b)}{a + 2}$

B $\frac{3a(3 + b)}{a + 2}$

C $\frac{a + 2}{3a(3 - b)}$

D $\frac{a - 2}{3a(3 + b)}$

- 21** Given $2(x + 3y^2) = 2 - 3y^2$ express y in terms of x .

Diberi $2(x + 3y^2) = 2 - 3y^2$ ungkapkan y dalam sebutan x .

A $y = \frac{\sqrt{2 - 2x}}{3}$

B $y = \frac{\sqrt{2 + 2x}}{3}$

C $y = \frac{\sqrt{2x + 2}}{9}$

D $y = \frac{\sqrt{2x - 2}}{9}$

- 22 Adam sells two types of cakes at different prices. A slice of Chocolate cake is sold at RM3 and a slice of cheese cake is sold at twice of chocolate cake's price. In conjunction with the opening of a new branch, he is giving a 50% discount on all types of cake prices. Derive the formula for the selling price of cake, z , if m slices chocolate cake and n slices cheese cake are sold.

Adam menjual dua jenis kek pada harga yang berlainan. Kek coklat dijual pada harga RM3 sepotong manakala kek keju dijual pada harga dua kali ganda harga kek coklat. Sempena pembukaan cawangan baharu, dia memberikan diskaun 50% untuk semua jenis harga kek. Bentukkan rumus pengiraan harga jualan kek, z , jika m potong kek coklat dan n potong kek keju yang telah dijual.

- A $z = (3m + 6n)$
B $z = (1 \cdot 3m + 6n)$
C $z = (1 \cdot 5m + 3n)$
D $z = (15m + 30n)$

- 23 Simplify:

Permudahkan:

$$\left(\frac{49a^2}{b^8} \right)^{\frac{1}{2}} \div a^3b$$

- A $\frac{7}{a^2b^5}$
B $\frac{7}{a^5b^7}$
C $\frac{7}{a^2b}$
D $\frac{7a}{b^8}$

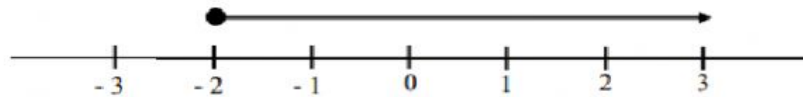
- 24 Find the value of
Cari nilai bagi

$$\frac{5^{\frac{3}{2}} \times 3^{-1}}{3^2 \times 5^{\frac{1}{2}}}$$

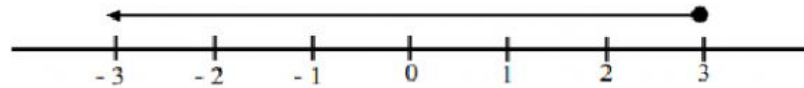
- A $\frac{1}{27}$
B $\frac{5}{27}$
C $\frac{5}{9}$
D $\frac{5}{3}$

- 25 Which of the following number lines is the solution for inequalities $-3x + 5 \geq -1$?
Di antara garis nombor berikut, yang manakah penyelesaian ketaksamaan bagi $-3x + 5 \geq -1$?

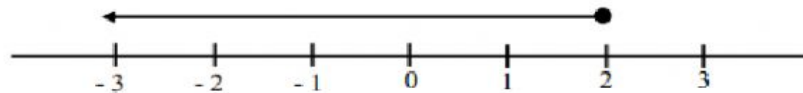
A



B



C



D

