

Answers all questions.
Jawab semua soalan.

Section A
Bahagian A
[20 marks/markah]

- 1 Given $p = 2$, $q = -3$ and $r = \frac{4}{5}$, evaluate $2pq - q^2 + 25r$.

Diberi $p = 2$, $q = -3$ dan $r = \frac{4}{5}$, nilaikan $2pq - q^2 + 25r$.

- A -21 C 17
B -1 D 22

- 2 Simplify the expression $\frac{12t + pk}{3} - 5\left(\frac{t}{5} - \frac{pk}{15}\right)$.

Permudahkan ungkapan $\frac{12t + pk}{3} - 5\left(\frac{t}{5} - \frac{pk}{15}\right)$.

- A $3t$ C $3t - \frac{2}{3}pk$
B $\frac{2}{3}pk$ D $3t + \frac{2}{3}pk$

- 3 Solve the inequality $2(5 - x) < 7 + 3x$.
Selesaikan ketaksamaan $2(5 - x) < 7 + 3x$.

- A $x > \frac{3}{5}$ C $\frac{5}{3} < x$
B $x < \frac{3}{5}$ D $\frac{5}{3} > x$

- 4 In Diagram 1, given $x : y = 2 : 1$, find the angle of depression A from B.

Dalam Rajah 1, diberi $x : y = 2 : 1$, cari sudut tunduk A dari B.

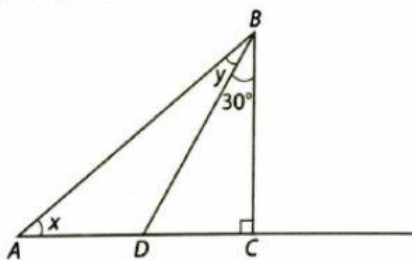


Diagram 1
Rajah 1

- A 20° C 60°
B 40° D 120°

- 5 Determine the formula that represents the sequence $-4, -2, 0, 2, 4, \dots$, where $n = 1, 2, 3, \dots$.
Tentukan rumus yang mewakili turutan $-4, -2, 0, 2, 4, \dots$, di mana $n = 1, 2, 3, \dots$

- A $2(n - 3)$ C $-2(2n + 1)$
B $n - 5$ D $-3n - 1$

- 6 In Diagram 2, ABC is an equilateral triangle. Dalam Rajah 2, ABC ialah segi tiga sama sisi.

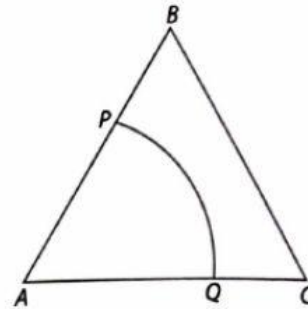


Diagram 2
Rajah 2

APQ is a sector with A as the centre. Given $BC = 21$ cm and $AP : PB = 2 : 1$, find the perimeter of sector APQ. (Use $\pi = \frac{22}{7}$)

APQ ialah sektor dengan A sebagai pusat. Diberi $BC = 21$ cm dan $AP : PB = 2 : 1$. Cari perimeter sektor APQ. (Guna $\pi = \frac{22}{7}$)

- A 14 C $14\frac{2}{3}$
B 28 D $42\frac{2}{3}$

- 7 Diagram 3 shows a straight line PQR drawn on a Cartesian plane with O as an origin. Rajah 3 menunjukkan garis lurus PQR dilukis pada satah Cartes dengan O ialah asalan.

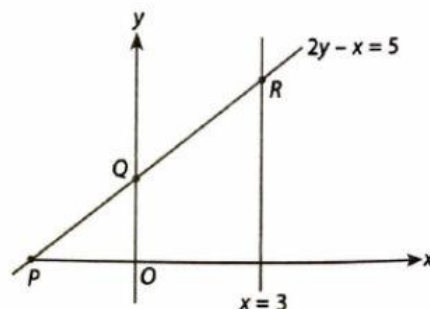


Diagram 3
Rajah 3

Find the coordinates of point R.
Cari koordinat bagi titik R.

- A (3, 4) C (3, 1)
B (4, 3) D (1, 3)