

PENYELESAIAN LENGKAP

PRAKTIS 10

Praktis Formatif

$$1 \text{ Kecerunan} = \frac{\text{Jarak mencancang}}{\text{Jarak mengufuk}}$$

$$\text{Gradient} = \frac{\text{Vertical distance}}{\text{Horizontal distance}}$$

$$= \frac{QT}{KQ}$$

Jawapan/Answer: A

2 r, t, s, p, q

3 Condong ke atas dari kiri ke kanan: b, d, e

Inclined upward from left to right: b, d, e

Condong ke bawah dari kiri ke kanan: a, c, f

Inclined downward from left to right: a, c, f

4 (a)

Garis lurus <i>Straight line</i>	Jarak mencancang <i>Vertical distance</i>	Jarak mengufuk <i>Horizontal distance</i>	Kecerunan <i>Gradient</i>
HK	3 unit/units	4 unit/units	$\frac{3}{4}$
PQ	4 unit/units	3 unit/units	$\frac{4}{3}$

(b) (i) Kecerunan garis lurus PQ
kecerunan garis lurus HK
Steepness of straight line PQ
steepness of straight line HK

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>

(ii) Kecerunan garis lurus PQ
kecerunan garis lurus HK
Gradient of straight line PQ
gradient of straight line HK

>

>

5 (a) Jarak mencancang di antara A dan B
Vertical distance between A and B

$$= y_2 - y_1$$

Jarak mengufuk di antara A dan B

Horizontal distance between A and B

$$= x_2 - x_1$$

Kecerunan garis lurus

Gradient of straight line

$$= \frac{\text{Jarak BC}}{\text{Jarak AC}}$$

$$= \frac{\text{Distance BC}}{\text{Distance AC}}$$

$$= \frac{y_2 - y_1}{x_2 - x_1}$$

(b) Kecerunan garis lurus
Gradient of straight line

$$= \frac{0 - b}{a - 0}$$

$$= -\frac{b}{a}$$

$$= -\frac{\text{Pintasan-}y/y\text{-intercept}}{\text{Pintasan-}x/x\text{-intercept}}$$

6 (a) (i) Kecerunan garis lurus AB
Gradient of straight line AB

$$= \frac{3}{2}$$

(ii) Kecerunan garis lurus CD
Gradient of straight line CD

$$= -\frac{4}{2}$$

$$= -2$$

(b) (i) ✗

(ii) ✓

(iii) ✓

7 (a) Kecerunan MN/*Gradient of MN*

$$= \frac{20}{56}$$

$$= \frac{5}{14}$$

(b) Kecerunan MN/*Gradient of MN*

$$= -\frac{120}{930}$$

$$= -\frac{4}{31}$$

8 (a) Kecerunan AB/*Gradient of AB*

$$= \frac{5}{2}$$

(b) Kecerunan CD/*Gradient of CD* = 0

(c) Kecerunan EF/*Gradient of EF* = ∞

(d) Kecerunan GH/*Gradient of GH*

$$= -\frac{3}{3}$$

$$= -1$$

9 (a) Kecerunan/*Gradient*

$$= \frac{1 - 5}{3 - 8}$$

$$= \frac{-4}{-5}$$

$$= \frac{4}{5}$$

(b) Kecerunan/Gradient

$$\begin{aligned} &= \frac{9+3}{-6-2} \\ &= \frac{12}{-8} \\ &= -\frac{3}{2} \end{aligned}$$

(c) Kecerunan/Gradient

$$\begin{aligned} &= \frac{-4+1}{4-5} \\ &= \frac{-3}{-1} \\ &= 3 \end{aligned}$$

10 (a) Kecerunan = $-\frac{\text{Pintasan-}y}{\text{Pintasan-}x}$
Gradient = $-\frac{y\text{-intercept}}{x\text{-intercept}}$
 $= -\frac{1}{2}$

(b) Kecerunan/Gradient = $-\frac{8}{-6}$
 $= \frac{4}{3}$

(c) Kecerunan/Gradient = $-\frac{-9}{-15}$
 $= -\frac{3}{5}$

11 (a) Kecerunan = $-\frac{\text{Pintasan-}y}{\text{Pintasan-}x}$
Gradient = $-\frac{y\text{-intercept}}{x\text{-intercept}}$

$$-\frac{b}{2} = -\frac{3}{2}$$

$b = 3$

Pintasan- $y = 3$
 $y\text{-intercept} = 3$

(b) $-\frac{-10}{a} = \frac{5}{4}$
 $5a = 40$
 $a = 8$

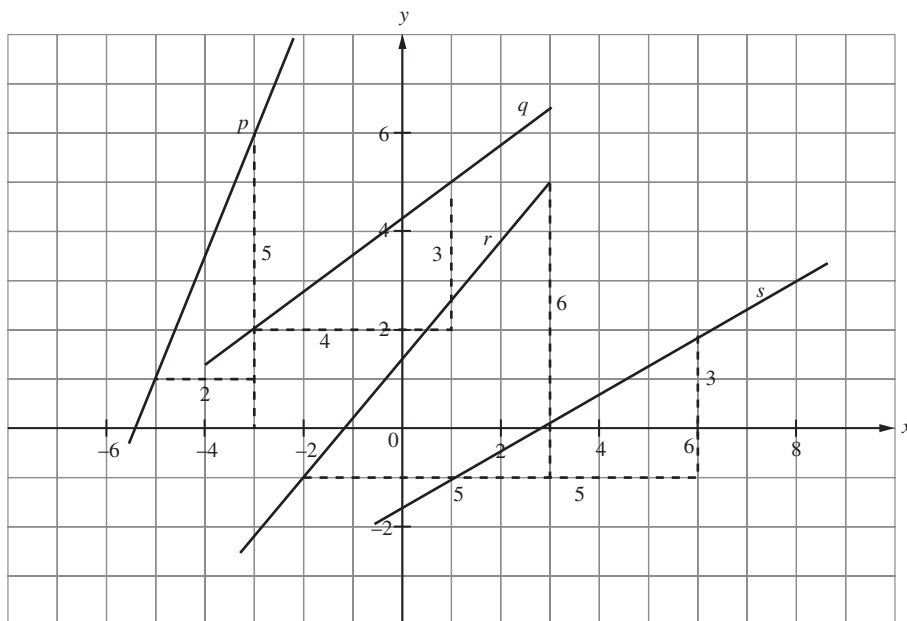
Pintasan- $x = 8$
 $x\text{-intercept} = 8$

(c) $-\frac{b}{-12} = \frac{1}{3}$
 $3b = 12$
 $b = 4$

Pintasan- $y = 4$
 $y\text{-intercept} = 4$

Praktis Sumatif

1



Kecerunan/Gradient $p = \frac{5}{2}$

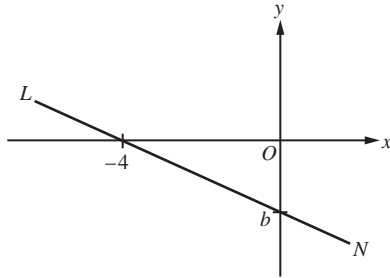
Kecerunan/Gradient $q = \frac{3}{4}$

Kecerunan/Gradient $r = \frac{6}{5}$

Kecerunan/Gradient $s = \frac{3}{5}$

Jawapan/Answer: D

2



$$-\frac{b}{-4} = -\frac{1}{3}$$

$$\frac{b}{4} = -\frac{1}{3}$$

$$b = -\frac{4}{3}$$

$$\text{Pintasan-}y = -\frac{4}{3}$$

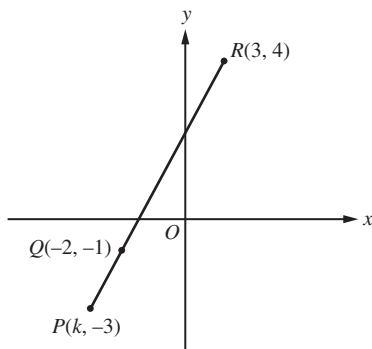
$$y\text{-intercept} = -\frac{4}{3}$$

Jawapan/Answer: C

$$\begin{aligned} 3 \text{ Kecerunan/Gradient} &= -\frac{4}{6} \\ &= -\frac{2}{3} \end{aligned}$$

Jawapan/Answer: B

4



$$\text{Kecerunan PQ} = \text{Kecerunan QR}$$

$$\text{Gradient PQ} = \text{Gradient QR}$$

$$\frac{-1 + 3}{-2 - k} = \frac{4 + 1}{3 + 2}$$

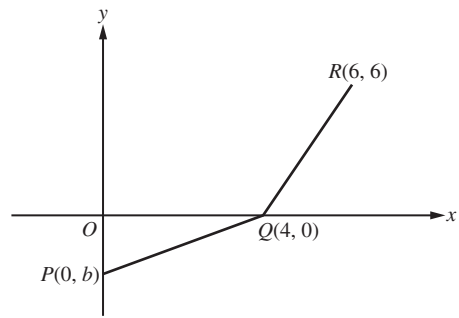
$$\frac{2}{-2 - k} = \frac{5}{5}$$

$$2 = -2 - k$$

$$k = -4$$

Jawapan/Answer: C

5



$$\text{Kecerunan QR} = 2 \times \text{Kecerunan PQ}$$

$$\text{Gradient QR} = 2 \times \text{Gradient PQ}$$

$$\frac{6 - 0}{6 - 4} = 2 \times \left(-\frac{b}{4}\right)$$

$$\frac{6}{2} = -\frac{b}{2}$$

$$3 = -\frac{b}{2}$$

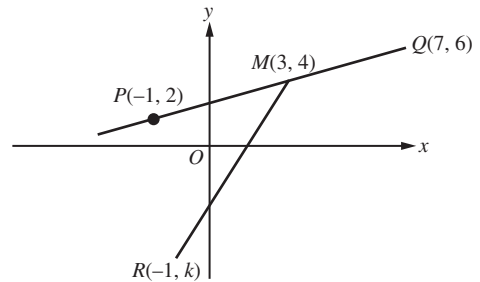
$$b = -6$$

Koordinat bagi P ialah (0, -6).

The coordinates of P are (0, -6).

Jawapan/Answer: A

6



$$\text{Kecerunan MR} = 4 \times \text{Kecerunan PQ}$$

$$\text{Gradient MR} = 4 \times \text{Gradient PQ}$$

$$\frac{4 - k}{3 + 1} = 4 \times \frac{6 - 2}{7 + 1}$$

$$\frac{4 - k}{4} = 4 \times \frac{4}{8}$$

$$\frac{4 - k}{4} = 2$$

$$4 - k = 8$$

$$k = -4$$