Jawapan

Praktis Formatif

1. $\text{Kecerunan} = \dfrac{\text{Jarak mencancang}}{\text{Jarak mengufuk}}$

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

   $= \dfrac{QT}{KQ}$

   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 *Straight line*	Jarak mencancang *Vertical distance*	Jarak mengufuk *Horizontal distance*	Kecerunan *Gradient*
HK	3 unit/*units*	4 unit/*units*	$\dfrac{3}{4}$
PQ	4 unit/*units*	3 unit/*units*	$\dfrac{4}{3}$

   (b) (i) Kecuraman garis lurus PQ $\boxed{>}$
   kecuraman garis lurus HK
   Steepness of straight line PQ $\boxed{>}$
   steepness of straight line HK

   (ii) Kecerunan garis lurus PQ $\boxed{>}$
   kecerunan garis lurus HK
   Gradient of straight line PQ $\boxed{>}$
   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
   $= \dfrac{\text{Jarak } BC}{\text{Jarak } AC}$
   $\dfrac{\text{Distance } BC}{\text{Distance } AC}$
   $= \dfrac{y_2 - y_1}{x_2 - x_1}$

   (b) Kecerunan garis lurus
   Gradient of straight line
   $= \dfrac{0 - b}{a - 0}$
   $= -\dfrac{b}{a}$
   $= -\dfrac{\text{Pintasan-}y/y\text{-intercept}}{\text{Pintasan-}x/x\text{-intercept}}$

6. (a) (i) Kecerunan garis lurus AB
   Gradient of straight line AB
   $= \dfrac{3}{2}$

   (ii) Kecerunan garis lurus CD
   Gradient of straight line CD
   $= -\dfrac{4}{2}$
   $= -2$

   (b) (i) ✗
   (ii) ✓
   (iii) ✓

7. (a) Kecerunan MN/*Gradient of MN*
   $= \dfrac{20}{56}$
   $= \dfrac{5}{14}$

   (b) Kecerunan MN/Gradient of MN
   $= -\dfrac{120}{930}$
   $= -\dfrac{4}{31}$

8. (a) Kecerunan AB/Gradient of AB
   $= \dfrac{5}{2}$

   (b) Kecerunan CD/Gradient of $CD = 0$
   (c) Kecerunan EF/Gradient of $EF = \infty$
   (d) Kecerunan GH/Gradient of GH
   $= -\dfrac{3}{3}$
   $= -1$

9. (a) Kecerunan/*Gradient*
   $= \dfrac{1 - 5}{3 - 8}$
   $= \dfrac{-4}{-5}$
   $= \dfrac{4}{5}$

(b) Kecerunan/*Gradient*

$$= \frac{9+3}{-6-2}$$

$$= \frac{12}{-8}$$

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

(c) Kecerunan/*Gradient*

$$= \frac{-4+1}{4-5}$$

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

$$= 3$$

10 (a) Kecerunan $= -\dfrac{\text{Pintasan-}y}{\text{Pintasan-}x}$

      Gradient $= -\dfrac{y\text{-intercept}}{x\text{-intercept}}$

$$= -\frac{1}{2}$$

(b) Kecerunan/*Gradient* $= -\dfrac{8}{-6}$

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

(c) Kecerunan/*Gradient* $= -\dfrac{-9}{-15}$

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

11 (a) Kecerunan $= -\dfrac{\text{Pintasan-}y}{\text{Pintasan-}x}$

      Gradient $= -\dfrac{y\text{-intercept}}{x\text{-intercept}}$

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

$$b = 3$$

Pintasan-$y = 3$

y-intercept $= 3$

(b) $-\dfrac{-10}{a} = \dfrac{5}{4}$

$$5a = 40$$

$$a = 8$$

Pintasan-$x = 8$

x-intercept $= 8$
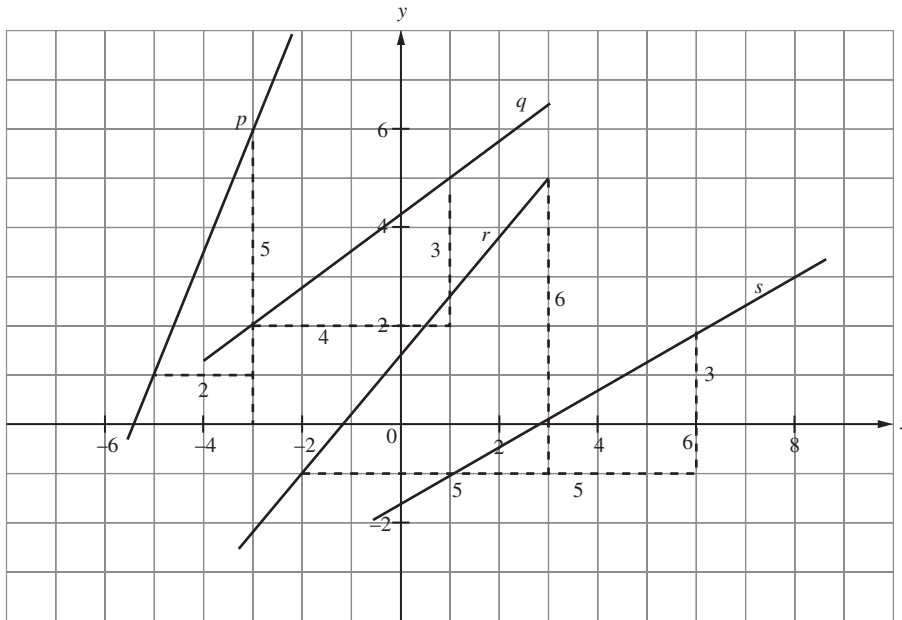
(c) $-\dfrac{b}{-12} = \dfrac{1}{3}$

$$3b = 12$$

$$b = 4$$

Pintasan-$y = 4$

y-intercept $= 4$

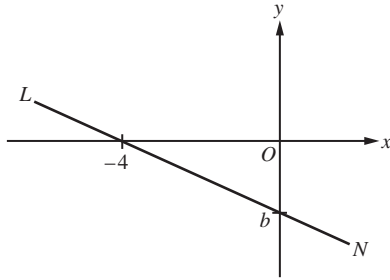## Praktis Sumatif

1

Kecerunan/*Gradient* $p = \dfrac{5}{2}$

Kecerunan/*Gradient* $q = \dfrac{3}{4}$

Kecerunan/*Gradient* $r = \dfrac{6}{5}$

Kecerunan/*Gradient* $s = \dfrac{3}{5}$

Jawapan/*Answer*: **D**

2

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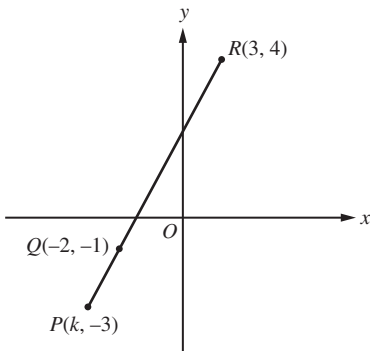$$b = -\frac{4}{3}$$

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

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

Jawapan/*Answer*: **C**

3 Kecerunan/*Gradient* $= -\dfrac{4}{6}$
$$= -\frac{2}{3}$$

Jawapan/*Answer*: **B**

4

Kecerunan PQ = Kecerunan QR
Gradient PQ = *Gradient QR*
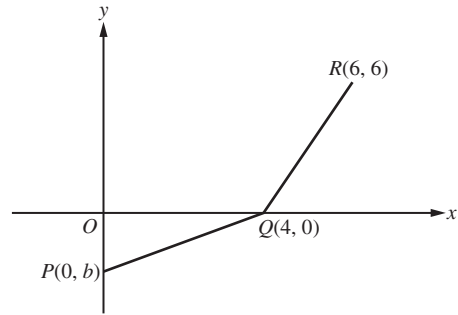$$\frac{-1+3}{-2-k} = \frac{4+1}{3+2}$$
$$\frac{2}{-2-k} = \frac{5}{5}$$
$$2 = -2-k$$
$$k = -4$$

Jawapan/*Answer*: **C**

5

Kecerunan QR = 2 × Kecerunan PQ
Gradient QR = 2 × *Gradient PQ*
$$\frac{6-0}{6-4} = 2 \times \left(-\frac{b}{4}\right)$$
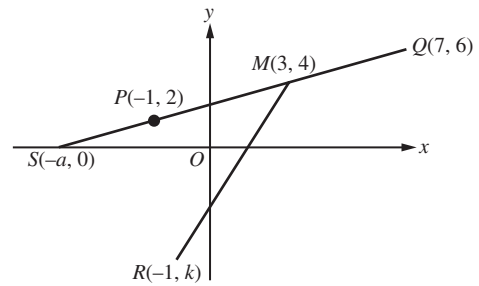$$\frac{6}{2} = -\frac{b}{2}$$
$$3 = -\frac{b}{2}$$
$$b = -6$$

Koordinat bagi P ialah $(0, -6)$.
The coordinates of P are $(0, -6)$.
Jawapan/*Answer*: **A**

6

Kecerunan MR = 4 × Kecerunan PQ
Gradient MR = 4 × *Gradient PQ*
$$\frac{4-k}{3+1} = 4 \times \frac{1}{2}$$
$$\frac{4-k}{4} = 2$$
$$4-k = 8$$
$$k = -4$$