

# Penyelesaian Lengkap

## PRAKTIS 10

### Bahagian A

- 1  $QR$  = Jarak mengufuk/*Horizontal distance*  
 $PQ$  = Jarak mencancang/*Vertical distance*

Jawapan/Answer: B

- 2 Sudut kecondongan  $JL$  adalah terbesar.  
*Angle of inclination of  $JL$  is the largest.*

Jawapan/Answer: A

- 3  $\text{Kecerunan} = \frac{\text{Jarak mencancang}}{\text{Jarak mengufuk}}$

$$\begin{aligned} \text{Gradient} &= \frac{\text{Vertical distance}}{\text{Horizontal distance}} \\ &= \frac{8}{3} \end{aligned}$$

Jawapan/Answer: D

- 4  $\text{Kecerunan/Gradient} = \frac{7 - (-5)}{6 - 2}$

$$\begin{aligned} &= \frac{12}{4} \\ &= 3 \end{aligned}$$

Jawapan/Answer: C

- 5  $\text{Kecerunan/Gradient} = \frac{-15 - 5}{2 - (-3)}$

$$\begin{aligned} &= -\frac{20}{5} \\ &= -4 \end{aligned}$$

Jawapan/Answer: A

- 6  $\text{Kecerunan/Gradient} = -\frac{8}{12}$

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

Jawapan/Answer: B

- 7  $\text{Kecerunan/Gradient} = -\frac{-12}{6}$

$$= 2$$

Jawapan/Answer: D

- 8  $\text{Kecerunan } PQ/\text{Gradient of } PQ = 0$

$$\begin{aligned} \frac{y - 5}{12 - 8} &= 0 \\ y - 5 &= 0 \\ y &= 5 \end{aligned}$$

Jawapan/Answer: C

- 9 Garis lurus  $SQ$  adalah paling curam.  
*Straight line  $SQ$  is the steepest.*

Jawapan/Answer: C

- 10  $\text{Kecerunan/Gradient} = -3$

$$-\frac{12}{x} = -3$$

$$-3x = -12$$

$$3x = 12$$

$$x = 4$$

Jawapan/Answer: B

- 11  $\text{Kecerunan/Gradient} = \frac{2}{5}$

$$\frac{-y}{-10} = \frac{2}{5}$$

$$y = \frac{2}{5} \times 10 = 4$$

Jawapan/Answer: C

- 12  $\text{Kecerunan/Gradient} = -4$

$$\frac{2 - (-4)}{m - 3} = -4$$

$$6 = -4(m - 3)$$

$$6 = -4m + 12$$

$$4m = 6$$

$$m = \frac{6}{4} = \frac{3}{2}$$

Jawapan/Answer: B

- 13  $\text{Kecerunan/Gradient} = \frac{2}{3}$

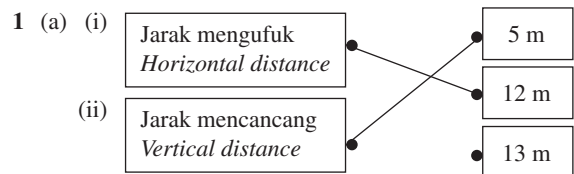
$$-\frac{y}{6} = \frac{2}{3}$$

$$y = -\frac{2}{3} \times 6$$

$$= -4$$

Jawapan/Answer: A

### Bahagian B



- (b)  $\text{Kecerunan} = \frac{\text{Jarak mencancang}}{\text{Jarak mengufuk}}$

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

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

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

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

$$= \frac{15}{8}$$

$$2 \text{ (a) Kecerunan } PQ/\text{Gradient of } PQ = \frac{-7-8}{2-(-3)}$$

$$= \frac{-15}{5}$$

$$= -3$$

$$\text{Kecerunan } RS/\text{Gradient of } RS = \frac{-1-5}{6-9}$$

$$= \frac{-6}{-3}$$

$$= 2$$

$$(b) \text{ (i) Kecerunan/Gradient} = -\frac{10}{5}$$

$$= -2 \quad [\checkmark]$$

$$(ii) \text{ Kecerunan/Gradient} = -\frac{-4}{8}$$

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

$$(iii) \text{ Kecerunan/Gradient} = -\frac{-6}{-3}$$

$$= -2 \quad [\checkmark]$$

3 (a) ✗ (b) ✓ (c) ✗ (d) ✓

### Bahagian C

1 (a) (i) 24 cm (ii) 7 cm  
(b) (i) 15 (ii) 6

$$(iii) \text{ Kecerunan} = \frac{\text{Pintasan-}y}{\text{Pintasan-}x}$$

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

$$= -\frac{6}{15}$$

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

$$(c) \text{ (i) } OP = \frac{5}{3} OR$$

$$= \frac{5}{3} \times 6$$

$$= 10$$

$$\therefore P(-10, 0)$$

(ii)  $R(0, 6)$

$$S = \left( \frac{-10+0}{2}, \frac{0+0}{2} \right)$$

$$= (-5, 0)$$

$Q(-10, 6)$

Kecerunan  $QS/\text{Gradient of } QS$

$$= \frac{6-0}{-10-(-5)}$$

$$= -\frac{6}{5}$$

2 (a) Jarak mencancang/Vertical distance = 4  
Jarak mengufuk/Horizontal distance = 8

$$\text{Kecerunan/Gradient} = \frac{4}{8}$$

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

(b) (i) Kecerunan/Gradient = -3

$$\frac{15-3}{-2-k} = -3$$

$$12 = -3(-2-k)$$

$$12 = 6 + 3k$$

$$3k = 6$$

$$k = 2$$

(ii)  $P(-8, 0), Q(0, -4)$

$$\text{Kecerunan/Gradient} = -\frac{-4}{-8}$$

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

(c)  $KO = 8, JK = 17, OJ = 15, KL = 10, OL = 6$

$$(i) \text{ Kecerunan } JK/\text{Gradient of } JK = \frac{-8}{-15}$$

$$= \frac{8}{15}$$

$$(ii) \text{ Kecerunan } KL/\text{Gradient of } KL = -\frac{8}{6}$$

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