

Penyelesaian Lengkap

PRAKTIS 9

Bahagian A

1 $5y + 2x = 20$
 $x = 0, \quad 5y + 2(0) = 20$
 $5y = 20$
 $y = 4$

Jawapan/Answer: B

2 $4x - 7y = 19$
 $x = 3, \quad y = -1$
 $4(3) - 7(-1) = 12 + 7$
 $= 19$

Jawapan/Answer: C

3 $m = 4, (3, 5)$
 $y - 5 = 4(x - 3)$
 $y - 5 = 4x - 12$
 $y = 4x - 7$

Jawapan/Answer: D

4 $3x + 8y = 24$
 $8y = -3x + 24$
 $y = -\frac{3}{8}x + 3$

$6x = -16y + 11$
 $16y = -6x + 11$
 $y = -\frac{6}{16}x + \frac{11}{16}$
 $y = -\frac{3}{8}x + \frac{11}{16}$

Selari/Parallel

Jawapan/Answer: B

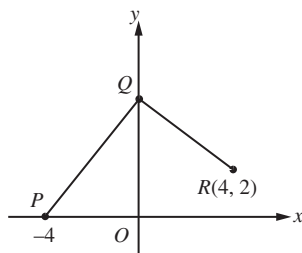
5 $6y = 5x - 10$
 $y = 0, \quad 0 = 5x - 10$
 $5x = 10$
 $x = 2$

Jawapan/Answer: D

6 $8x - 3y = 24$
 $-3y = -8x + 24$
 $y = \frac{8}{3}x - 8$
 $m = \frac{8}{3}$

Jawapan/Answer: D

7



$$m = -\frac{\text{pintasan-}y}{\text{pintasan-}x} \quad m = -\frac{y\text{-intercept}}{x\text{-intercept}}$$

$Q(0, y)$

$$2.5 = -\frac{y}{-4}$$

$$2.5 = \frac{y}{4}$$

$$y = 10$$

$$m_{QR} = \frac{10 - 2}{0 - 4}$$

$$= -2$$

Jawapan/Answer: A

8 $\frac{x}{3} + \frac{y}{-6} = 1$

Pintasan- x / x -intercept = 3,

Pintasan- y / y -intercept = -6

Jawapan/Answer: B

9 $m = -\frac{\text{pintasan-}y}{\text{pintasan-}x} \quad m = -\frac{y\text{-intercept}}{x\text{-intercept}}$

$$m = -\frac{-6}{14} = \frac{3}{7}$$

Jawapan/Answer: C

10 $J(4, -9) \quad D(20, 3)$

$$m = \frac{-9 - 3}{4 - 20}$$

$$= \frac{-12}{-16}$$

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

Jawapan/Answer: D

11 $m = -\frac{\text{pintasan-}y}{\text{pintasan-}x} \quad m = -\frac{y\text{-intercept}}{x\text{-intercept}}$

$$-\frac{2}{5} = -\frac{y}{-3}$$

$$-\frac{2}{5} = \frac{y}{3}$$

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

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

Jawapan/Answer: B

12 $4x + my + 10 = 0$

$$my = -4x - 10$$

$$y = -\frac{4}{m}x - \frac{10}{m}$$

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

$$2m = -4$$

$$m = -2$$

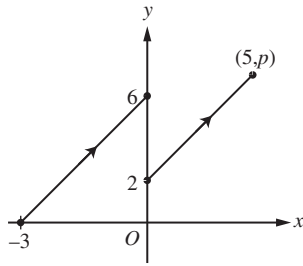
Jawapan/Answer: A

13 $m = -3$ $c = 1$ for $(0, 1)$

$y = -3x + 1$

Jawapan/Answer: C

14



$$\frac{p-2}{5-0} = -\frac{6}{-3}$$

$$\frac{p-2}{5-0} = 2$$

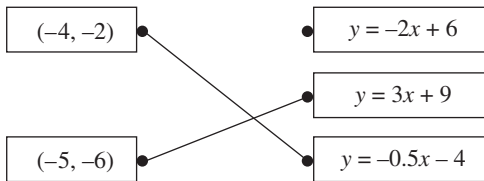
$$p-2 = 10$$

$$p = 12$$

Jawapan/Answer: C

Bahagian B

1 (a)



(b) (i) Palsu/False

(ii) Benar/True

2 (a) (i) Kecerunan/Gradient = 6

(ii) Pintasan-y/y-intercept = -11

(b) (i) 1 (ii) 0

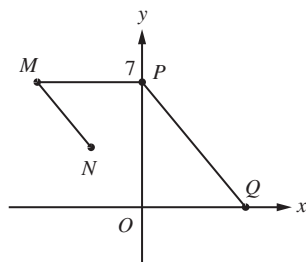
3 (a) (i) $y = 8$ (ii) $x = -5$

(b) (i) pintasan-x/x-intercept = 8

(ii) pintasan-y/y-intercept = 6

Bahagian C

1 (a) (i)



$$M(x, 7)$$

$$y + 3x + 2 = 0$$

$$7 + 3x + 2 = 0$$

$$3x = -9$$

$$x = -3$$

$$\therefore M(-3, 7)$$

(ii) $MP = 0 - (-3) = 3$ unit

(iii) $y + 3x + 2 = 0$

$$y = -3x - 2$$

$$m_{MN} = -3$$

$MN \parallel PQ$

$$\therefore m_{PQ} = -3 \quad c = 7$$

$$y = -3x + 7$$

$$y = 0, \quad 0 = -3x + 7$$

$$3x = 7$$

$$x = \frac{7}{3}$$

$$\text{Pintasan-x/x-intercept} = \frac{7}{3}$$

(b) (i) $RS: y = 4x - 5$

$$m_{PQ} = m_{RS} = 4 \quad Q(3, 14)$$

$$y - 14 = 4(x - 3)$$

$$y = 4x + 2$$

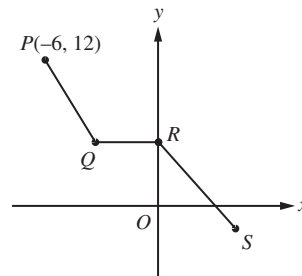
(ii) $y = 0, \quad 0 = 4x + 2$

$$-4x = 2$$

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

$$\text{pintasan-x/x-intercept} = -\frac{1}{2}$$

2 (a)



(i) $\frac{x}{2} + \frac{y}{5} = 1$

Pintasan-x/x-intercept = 2,

Pintasan-y/y-intercept = 5

$\therefore R(0, 5)$

Persamaan garis lurus QR/Equation of straight line QR is $y = 5$

(ii) $m_{PQ} = m_{RS} = -\frac{5}{2} \quad P(-6, 12)$

$$y - 12 = -\frac{5}{2}(x - (-6))$$

$$y - 12 = -\frac{5}{2}(x + 6)$$

$$y - 12 = -\frac{5}{2}x - 15$$

$$y = -\frac{5}{2}x - 15 + 12$$

$$y = -\frac{5}{2}x - 3$$

$$y = 0, \quad 0 = -\frac{5}{2}x - 3$$

$$\frac{5}{2}x = -3$$

$$x = -3\left(\frac{2}{5}\right)$$

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

$$\text{Pintasan-x/x-intercept} = -\frac{6}{5}$$

(b) $2x - \frac{1}{2}y = 4 \quad \dots(1)$

$5x - y = 12 \quad \dots(2)$

Dari / From (1) :

$$(1) \times 2 \quad 4x - y = 8 \quad \dots(3)$$

$$(2) - (3) \quad x = 4$$

Dari / From (2): $5(4) - y = 12$

$$20 - y = 12$$

$$-y = 12 - 20$$

$$y = 8$$

Titik persilangan ialah (4, 8).

The point of intersection is (4, 8).

3 (a) $2y = 6 - kx$

$$y = 3 - \frac{k}{2}x$$

$$y = -\frac{k}{2}x + 3$$

$$m_1 = -\frac{k}{2}$$

$$2x + 5y = 10$$

$$5y = -2x + 10$$

$$y = -\frac{2}{5}x + 2$$

$$m_2 = -\frac{2}{5}$$

$$m_1 = m_2$$

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

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

(b) $m = \frac{6-0}{4-2} = 3 \quad Q(2, 0)$

$$y - 0 = 3(x - 2)$$

$$y = 3x - 6$$

(c) $m_{QR} = m_{OP}$

$$= \frac{5-0}{4-0}$$

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

$$y - (-1) = \frac{5}{4}(x - (-6))$$

$$y + 1 = \frac{5}{4}(x + 6)$$

$$y + 1 = \frac{5}{4}x + \frac{15}{2}$$

$$y = \frac{5}{4}x + \frac{15}{2} - 1$$

$$y = \frac{5}{4}x + \frac{13}{2}$$

pintasan-y ialah/y-intercept is $\frac{13}{2}$.