Praktis ke Arah PT3

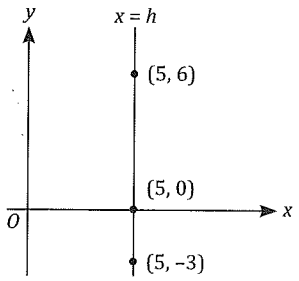
Jawab **semua** *soalan.*

Bahagian A

1 Tentukan kecerunan dan pintasan-y bagi garis lurus $4y - 5x = 8$.
Determine the gradient and y-intercept of the straight line $4y - 5x = 8$.

	Kecerunan *Gradient*	Pintasan-y *y-intercept*
A	$-\frac{5}{4}$	$\frac{1}{2}$
B	$-\frac{4}{5}$	2
C	$\frac{4}{5}$	$\frac{1}{2}$
D	$\frac{5}{4}$	2

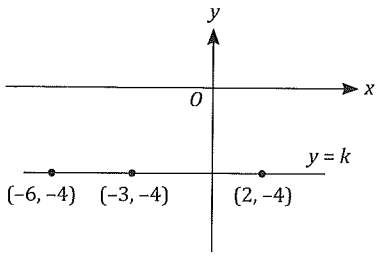
2 Rajah berikut menunjukkan satu garis lurus dilukis pada satah Cartes.
The following diagram shows a straight line drawn on a Cartesian plane.



Nyatakan nilai h.
State the value of h.

A −3 **C** 5
B 0 **D** 6

3 Rajah berikut menunjukkan satu garis lurus dilukis pada satah Cartes.
The following diagram shows a straight line drawn on a Cartesian plane.



Nyatakan nilai k.
State the value of k.

A −6 **C** −3
B −4 **D** 2

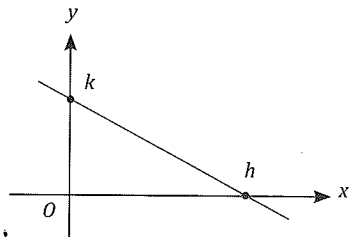
4 Nyatakan nilai m dan nilai c bagi persamaan $\frac{3}{2}x + \frac{y}{8} = 1$.
State the values of m and c for the equation $\frac{3}{2}x + \frac{y}{8} = 1$.

A $m = -12, c = 8$ **C** $m = 12, c = 8$
B $m = -12, c = 6$ **D** $m = 8, c = -12$

5 Antara titik berikut, yang manakah terletak pada garis lurus $3y = 4x - 9$?
Which of the following points lies on the straight line $3y = 4x - 9$?

A (−7, −3) **C** (3, 2)
B (−3, −7) **D** (6, 7)

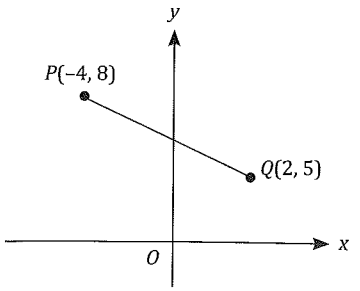
6 Rajah berikut menunjukkan graf garis $2x + 7y = 14$.
The following diagram shows a line graph $2x + 7y = 14$.



Cari nilai h dan nilai k.
Find the values of h and k.

A $h = 2, k = 7$
B $h = 4, k = 4$
C $h = 7, k = 2$
D $h = 7, k = 14$

7 Rajah berikut menunjukkan garis lurus PQ dilukis pada satah Cartes.
The following diagram shows straight line PQ drawn on a Cartesian plane.



Cari persamaan bagi garis lurus PQ.
Find the equation of the straight line PQ.

A $2y + x = 9$
B $2y + x = 12$
C $x + 2y = 12$
D $x + 2y = 18$

8 Jika garis lurus $6x + 5y = 12$ adalah selari dengan garis lurus $3x + hy = 8$, hitung nilai h.
If the straight line $6x + 5y = 12$ is parallel to the straight line $3x + hy = 8$, calculate the value of h.

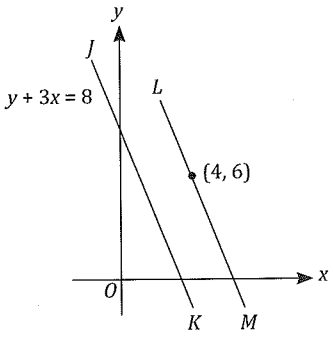
A $-\frac{5}{2}$ **C** $\frac{2}{5}$

B $-\frac{2}{5}$ **D** $\frac{5}{2}$

9 Tentukan persamaan bagi garis lurus yang melalui titik $P(-6, 9)$ dengan kecerunan $\frac{2}{3}$.
Determine the equation of a straight line which passes through point $P(-6, 9)$ with a gradient of $\frac{2}{3}$.

A $3y = 2x + 39$ **C** $2y = 3x + 39$
B $3y = 2x - 36$ **D** $2y = 3x - 36$

10 Rajah berikut menunjukkan dua garis lurus JK dan LM dilukis pada satah Cartes. Garis JK adalah selari dengan garis LM.
The following diagram shows two straight lines JK and LM drawn on a Cartesian plane. Line JK is parallel to the line LM.



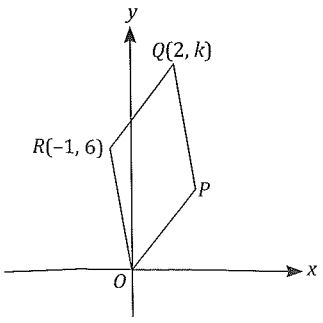
Cari persamaan bagi garis lurus LM.
Find the equation of the straight line LM.

A $3y + x = 18$ **C** $y + 3x = 18$
B $y + 3x = 16$ **D** $y + 3x = 28$

11 Tentukan titik persilangan bagi garis lurus $x + 2y = 6$ dan $2x = y - 8$.
Determine the point of intersection of straight lines $x + 2y = 6$ and $2x = y - 8$.

A $(-2, 4)$ **C** $(2, -4)$
B $(-1, 3)$ **D** $(4, -2)$

12 Rajah berikut menunjukkan sebuah segi empat selari $OPQR$ dilukis pada satah Cartes.
The following diagram shows a parallelogram $OPQR$ drawn on a Cartesian plane.

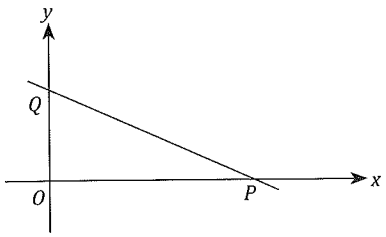


Diberi kecerunan bagi OP ialah $\frac{4}{3}$, hitung nilai k.
Given the gradient of OP is $\frac{4}{3}$, calculate the value of k.

A 7 **C** 9
B 8 **D** 10

Bahagian B

1 (*a*) Rajah di bawah menunjukkan garis lurus PQ dilukis pada satah Cartes. Diberi $OP = 15$ unit dan $5OQ = 4OP$.
The diagram below shows straight line PQ drawn on a Cartesian plane. Given $OP = 15$ units and $5OQ = 4OP$.

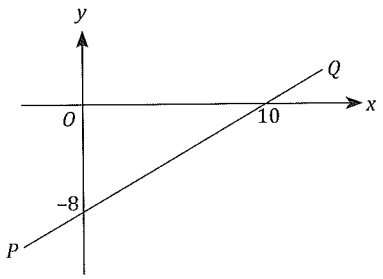


Cari kecerunan bagi garis lurus PQ.
Find the gradient of straight line PQ.

[2 markah/ *marks*]

Jawapan/ *Answer*:

(*b*) Rajah di bawah menunjukkan garis lurus PQ yang mempunyai persamaan $2y = px - 16$ dengan keadaan p ialah pemalar.
The diagram below shows straight line PQ with an equation of $2y = px - 16$, where p is a constant.



Cari nilai p.
Find the value of p.

[2 markah/ *marks*]

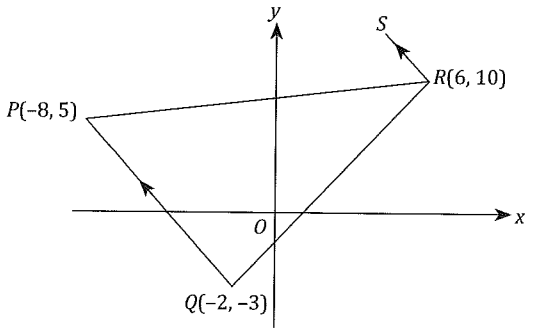
Jawapan/ *Answer*:

(*b*) Diberi bahawa persamaan satu garis lurus yang melalui titik (0, 12) ialah $y = -6x + c$. Cari titik persilangan garis lurus itu dengan paksi-*x*.
Given that the equation of a straight line which passes through point (0, 12) is $y = -6x + c$. Find the intersecting point of the straight line with the x-axis.

[3 markah/ *marks*]

Jawapan/ *Answer*:

(*c*) Rajah di bawah menunjukkan sebuah segi tiga *PQR* dilukis pada satah Cartes.
The diagram below shows a triangle PQR is drawn on a Cartesian plane.



Cari/ *Find*

(i) persamaan bagi garis lurus *SR*,
the equation of straight line SR,

[3 markah/ *marks*]

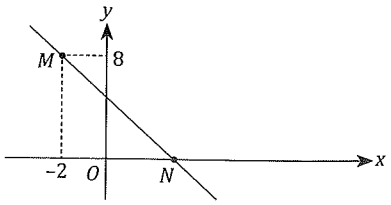
Jawapan/ *Answer*:

(ii) pintasan-*x* bagi garis lurus *SR*.
the x-intercept of straight line SR.

[1 markah/ *mark*]

Jawapan/ *Answer*:

6 (*a*) Rajah di bawah menunjukkan satu garis lurus *MN* dilukis pada satah Cartes.
The diagram below shows a straight line MN is drawn on a Cartesian plane.

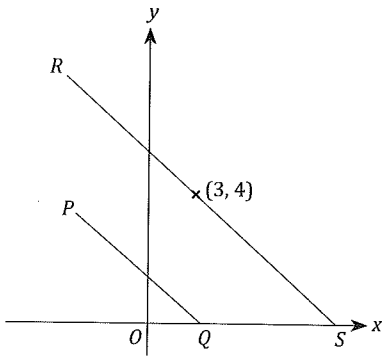


Diberi kecerunan *MN* ialah $-\frac{4}{3}$, cari pintasan-*x* bagi *MN*.
Given the gradient of MN is $-\frac{4}{3}$, find the x-intercept of MN.

[3 markah/ *marks*]

Jawapan/ *Answer*:

(*b*) Dalam rajah di bawah, garis lurus *PQ* adalah selari dengan garis lurus *RS*. Diberi persamaan garis lurus *PQ* ialah $y = -\frac{4}{3}x + 1$.
In the diagram below, straight line PQ is parallel to the straight line RS. Given the equation of straight line PQ is $y = -\frac{4}{3}x + 1$.



(i) Cari persamaan bagi garis lurus *RS*.
Find the equation of straight line RS.

[3 markah/ *marks*]

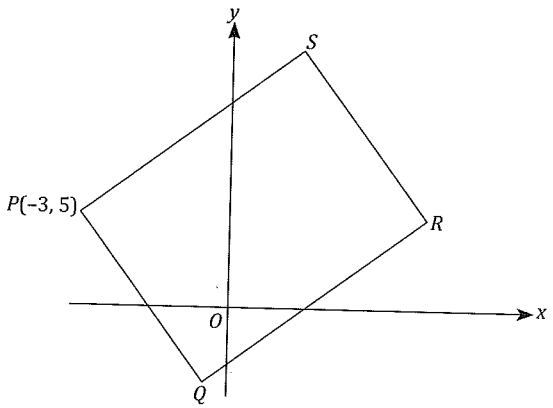
Jawapan/ *Answer*:

(ii) Cari pintasan-x bagi garis lurus RS.
Find the x-intercept for the straight line RS.

[1 markah/ *mark*

Jawapan/ *Answer*:

(c) Rajah di bawah menunjukkan sebuah segi empat selari $PQRS$ dan O ialah asalan. Diberi persamaan garis lurus QR ialah $3x - 2y = 4$.
The diagram below shows a parallelogram PQRS and O is the origin. Given the equation of straight line QR is $3x - 2y = 4$.



Cari persamaan garis lurus PS.
Find the equation of straight line PS.

[3 markah/ *marks*]

Jawapan/ *Answer*:

Praktis ke Arah PT3

Bahagian A/ *Section A*

1 D	**2** C	**3** B	**4** A	**5** B
6 C	**7** B	**8** D	**9** A	**10** C
11 A	**12** D			

Bahagian B/ *Section B*

1 (*a*) $-\frac{4}{5}$ (*b*) $\frac{8}{5}$

2 (*a*) $m = \frac{1}{2}, c = -4$

(*b*) (i) $x = 6$ (ii) $y = -5$

3 (*a*) (i) $\frac{x}{5} - \frac{y}{4} = 1$ (ii) $y = \frac{4}{5}x - 4$

(*b*) (i) ✓ (iii) ✓

4 (*a*) (i) ✓ (iii) ✓

(*b*) −6

Bahagian C/ *Section C*

5 (*a*) 5

(*b*) (2, 0)

(*c*) (i) $y = -\frac{4}{3}x + 18$ (ii) $\frac{27}{2}$

6 (*a*) Pintasan-$x = 4$

(*b*) (i) $y = -\frac{4}{3}x + 8$ (ii) Pintasan-$x = 6$

(*c*) $2y = 3x + 19$

CABARAN TIMSS/ PISA

1 $k = 15$

2 $y = -\frac{5}{3}x + 6$

Zon KBAT

1 $m_{KL} = -\frac{4}{3}$

2 (*a*) $R(12, 3)$

(*b*) $y = -\frac{1}{4}x + 6$

(*c*) Pintasan-$x = 24$