KEMENTERIAN PENDIDIKAN TINGGI

POLITEKNIK MALAYSIA KUCHING SARAWAK

JABATAN MATEMATIK, SAINS DAN KOMPUTER

		COURSE CODE/ COURSE NAME		PBM1035 INTENSIVE MATHEMATICS	
		COURSEWORK ASSESSMENT		TUTORIAL 4	
		SESSION		DECEMBER 2017	
NAME	Aeron Anak Simon	DURATION	60 MINS	CLO1	
				CLO2	10 MARKS
REGISTRATION NO.	05IPP17F2030			CLO3	
PROGRAMME/ SECTION	IPP1	TOTAL MARKS			10 MARKS

10
10
Good

Instructions

- Answer ALL questions. Write your answers in the spaces provided.
- Show your working to get marks. You may use a non-programmable scientific calculator.

Question 1

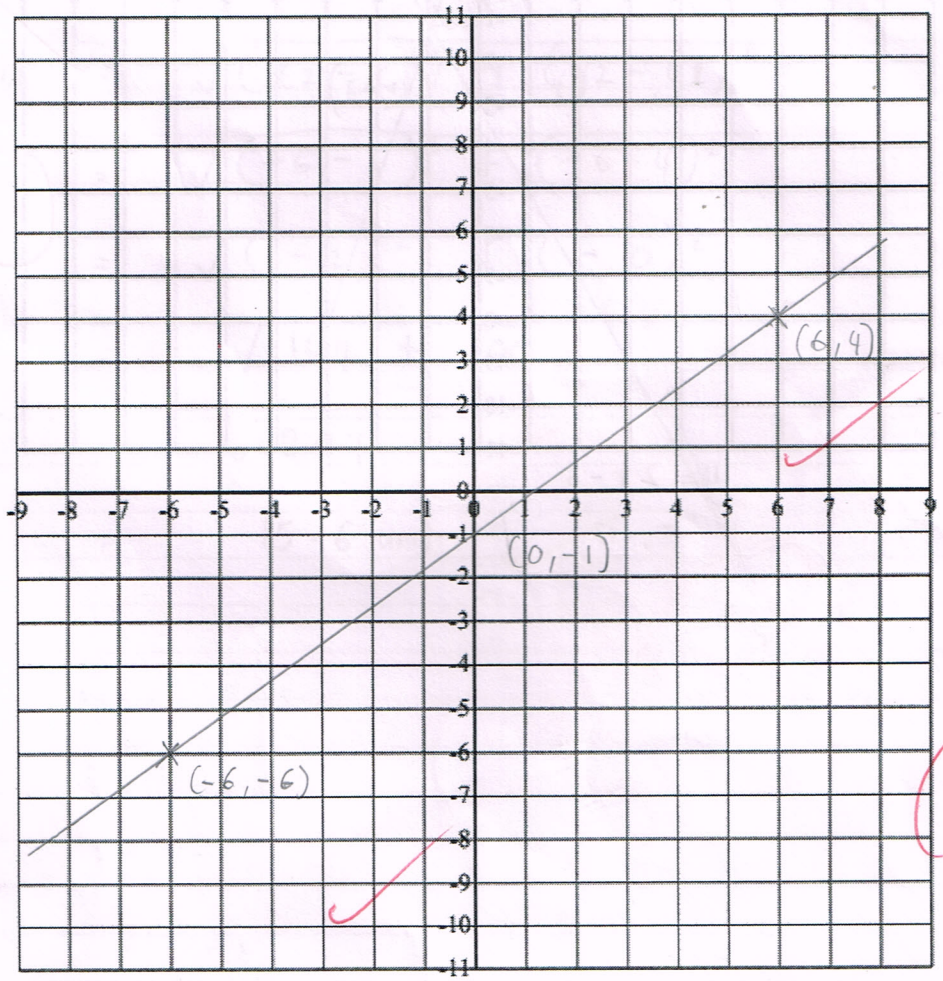
Given a pair of points A(6, 4) and B(-6, -6).

(a) Plot the points given and draw a straight line within two points. **[CLO2, C1]**

(b) Find the mid-point. **[CLO2, C1]**

(c) Find the distance between the points. **[CLO2, C2]**

[7 marks]



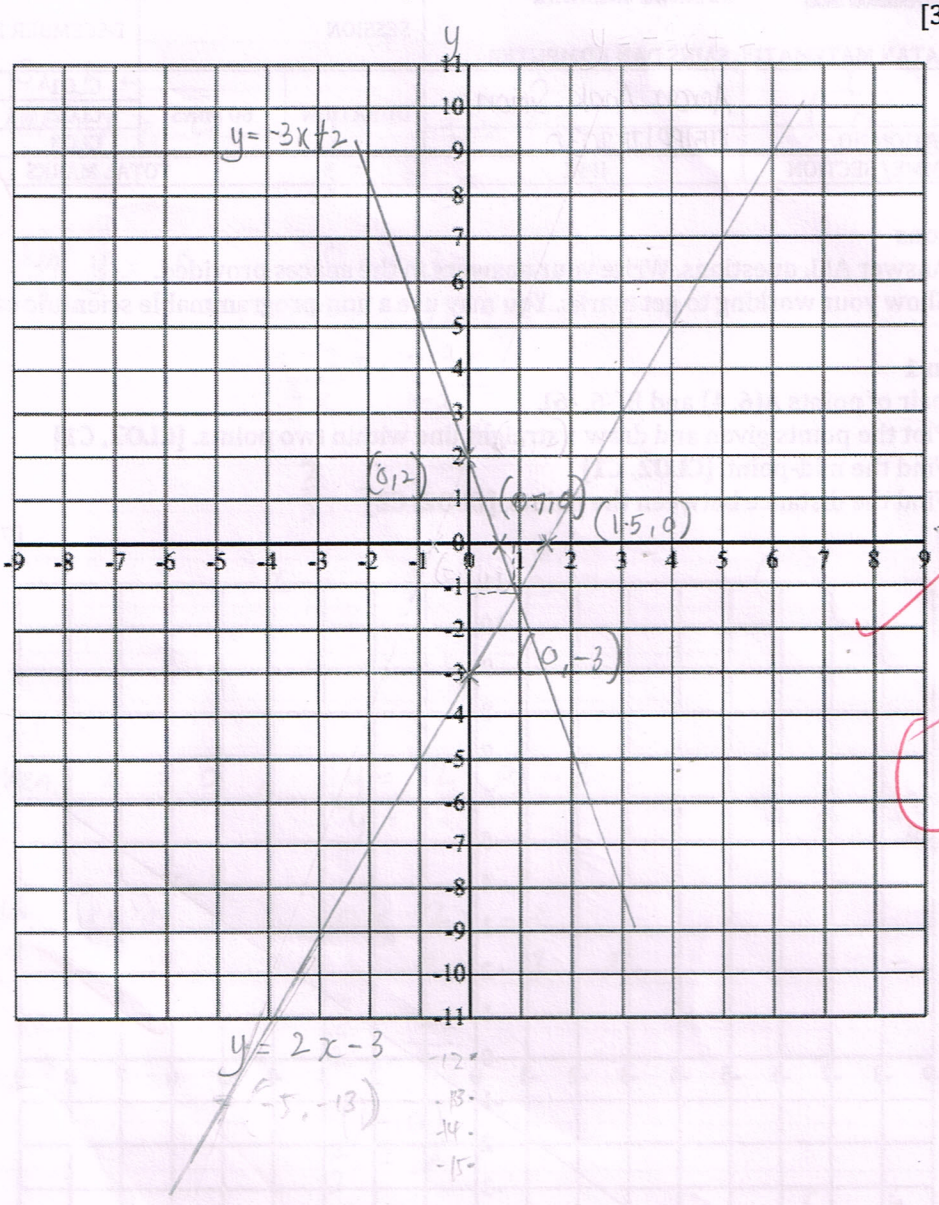
2

Question 2 [CLO2, C2]

Construct the point of intersection of the two lines given by graphing.

$$y = -3x + 2$$
$$y = 2x - 3$$

[3 marks]



x = -3 into ②

$y = -\frac{3}{3}(-5) + 2$

$y = -15 + 2$

$y = -13$

$x = -5$

intersection point is

(-5, -13)

Aeron Simon
05HPP17F2030

No. :

Date :

Tutorial 4

Question 1

b) Find the mid point (6, 4) (-6, -6)

$$\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}\right)$$

$$= \left(\frac{6 + (-6)}{2}, \frac{4 + (-6)}{2}\right)$$

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

$$= (0, -1)$$ ✓

3

c) Find the distance between the points.

$$\text{Distance} = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$= \sqrt{(-6 - 6)^2 + (-6 - 4)^2}$$

$$= \sqrt{(-12)^2 + (-10)^2}$$

$$= \sqrt{144 + 100}$$

$$= \sqrt{244}$$ ✓

$$= 15.6 \text{ unit}$$ ✓

2

No. :

Date :

Question 2

$y = -3x + 2$

$y = 2x - 3$

$y = -3x + 2$

when $x = 0$, $y = -3(0) + 2$

$y = 2$

$\begin{matrix} x & y \\ 0, & 2 \end{matrix}$

when $y = 0$ $\quad 0 = -3x + 2$

$0 - 2 = -3x + 2 - 2$

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

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

$x = \frac{2}{3} = 0.7$ $\quad \begin{matrix} x & y \\ 0.7, & 0 \end{matrix}$

$y = 2x - 3$

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

$y = -3$

$\begin{matrix} x & y \\ 0, & -3 \end{matrix}$

when $y = 0$, $\quad 0 = 2x - 3$

$0 + 3 = 2x - 3 + 3$

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

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

$x = \frac{3}{2} = 1.5$ $\quad \begin{matrix} x & y \\ 1.5, & 0 \end{matrix}$