

1) Nur Iyaz
2) Syuhadah

 KEMENTERIA PENDIDIKAN MALAYSIA				COURSE CODE/ COURSE NAME		PBM1035 INTENSIVE MATHEMATICS	
				COURSEWORK ASSESSMENT		END OF CHAPTER 1	
				SESSION		DECEMBER 2018	
				JABATAN MATEMATIK, SAINS DAN KOMPUTER		DURATION	60 MINS
CLO2	10						
CLO3							
NAME		SYUHADAH AQILAH		TOTAL MARKS		10 MARKS	
REGISTRATION NO.		051PP18F2002					
PROGRAMME/ SECTION		IPP1					

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

CLO1, C2

[2 marks]

- (a) Make x the subject for the formula $y = mx + c$.

CLO1, C2

[2 marks]

- (b) Calculate the value of c if given $m = -5$, $x = -2$ and $y = 3$.

Question 2

CLO1, C2

[4 marks]

Identify the value of x and y by solving the simultaneous equations below using substitution method.

$$2x - 3y = 5$$

$$2x - 4y = -2$$

Question 3

CLO1, C3

[2 marks]

If the present value of my investment is RM2500 and the rate of interest is 2% compounded annually, what will the value be after 15 years?

Q1

$$y = mx + c$$

$$y - c = mx + c - c$$

$$\frac{y - c}{m} = \frac{mx}{m}$$

$$x = \frac{y - c}{m}$$

Q.1

$$b) m = -5, x = -2, y = 3$$

$$y = mx + c, m = -5, x = -2$$

$$\text{and } y = 3$$

$$3 = -5(-2) + c$$

$$3 = 10 + c$$

$$3 - 10 = 10 - 10 + c$$

$$c = -7$$

Q2

$$2x - 3y = 5$$

$$2x - 4y = -2$$

$$2x - 4y = -2$$

$$2x - 4y + 4y = -2 + 4y$$

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

$$x = -1 + 2y$$

Sub ③ into ①

$$2x - 3y = 5$$

$$2(-1 + 2y) - 3y = 5$$

$$-2 + 4y - 3y = 5$$

$$-2 + y = 5$$

$$-2 + 2 + y = 5 + 2$$

$$y = 7$$

$$x = -1 + 2y$$

$$x = -1 + 2(7)$$

$$x = -1 + 14$$

$$x = 13$$

$$x = 13, y = 7$$

(H)

Q3

$$A = 2500(1 + 0.02)^{15}$$

$$= 2500(1.02)^{15}$$

$$= 2500 \times 1.345868338$$

$$= 3364$$

(2)