Rusyaidi 05IPP18F2022

KEMENTERIA PENDIDIKAN MALAYSIA — POLITEKNIK 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	CLO1	10 MARKS
NAME	Augustine			CLO2	10
REGISTRATION NO.	05IPP18F2025			CLO3	
PROGRAMME/ SECTION	IPP1	TOTAL MARKS		10 MARKS	

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

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 (a) $y = mx + c$

$y - c = mx + c - c$

$y - c = mx$

$\frac{mx}{m} = \frac{y - c}{m}$ (2)

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

(b) $y = mx + c$

$y = 3 \quad m = -5 \quad x = -2$

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

$3 = 10 + c$

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

$-7 = c$

$c = -7$ (2)

Q2 $2x - 3y = 5$ —①

$2x - 4y = -2$ —②

From ② $2x - 4y = -2$

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

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

$x = -1 + 2y$ —③

Substitute ③ into ①

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

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

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

$y = 7$

when $y = 7$

$x = -1 + 2(7)$

$x = -1 + 14$

$x = 13$

$\therefore y = 7 \quad x = 13$

4

Q3 $A = P(1+r)^t$

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

$A = 3364.67$

2

1) Nur Iyazi
2) Syuhadah

KEMENTERIA PENDIDIKAN MALAYSIA — POLITEKNIK MALAYSIA					
JABATAN MATEMATIK, SAINS DAN KOMPUTER			COURSE CODE/ COURSE NAME	PBM1035 INTENSIVE MATHEMATICS	
			COURSEWORK ASSESSMENT	END OF CHAPTER 1	
			SESSION	DECEMBER 2018	
NAME	SYUHADAH AQILAH	DURATION	60 MINS	CLO1	10 MARKS
REGISTRATION NO.	051PP18F2002			CLO2	10
PROGRAMME/ SECTION	IPP1	TOTAL MARKS		CLO3	
				10 MARKS	

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

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

a) $Y = mx + c$

$Y - c = mx + c - c$

$\frac{Y-c}{m} = \frac{mx}{m}$ ✓

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

Q.1

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

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

$2x - 3y = 5$
$2(-1 + 2y) - 3y = 5$
$-2 + 4y - 3y = 5$
$-2 + y = 5$
$-2 + 2 + y = 5 + 2$
$y = 7$ ✱

$x = -1 + 2y$
$x = -1 + 2(7)$
$x = -1 + 14$
$x = 13$ ✱

$x = 13, y = 7$ ✱

Q3

$A = 2500(1 + 0.02)^{15}$
$= 2500(0.02)^{15}$
$= 2500 \times 1.345868838$
$= 3364$ ✱

Bronica Bida (05IPP18F2003)
Olivia Pamela (05IPP18F2008)

KEMENTERIA PENDIDIKAN MALAYSIA — POLITEKNIK MALAYSIA JABATAN MATEMATIK, SAINS DAN KOMPUTER		COURSE CODE/ COURSE NAME		PBM1035 INTENSIVE MATHEMATICS	
		COURSEWORK ASSESSMENT		END OF CHAPTER 1	
		SESSION		DECEMBER 2018	
		DURATION	60 MINS	CLO1	10 MARKS
NAME				CLO2	8
REGISTRATION NO.				CLO3	
PROGRAMME/ SECTION	IPP1	TOTAL MARKS		10 MARKS	

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?

① $y = mx + c$

$y - c = mx + c - c$

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

$x = \frac{y - c}{m}$ (2)

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

$y = mx + c$

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

$3 = 10 + c$

$3 - 10 = 10 - 10 + c$

$3 - 10 = c$

$-7 = c$ (2)

② $2x - 3y = 5$ — ①

$2x - 4y = -2$ — ②

From ①

$2x - 3y = 5$

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

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

$x = \frac{5 + 3y}{2}$ — ③

③ $PV = 2500 \times \frac{1 - (1 + 0.02)^{-180}}{0.02}$

$= 2500 \times \frac{0.97168805}{0.02}$

$= 2500 \times 48.584404\,78$

$= 121461.012$ (2)

substitute ③ into ②

$2\left(\frac{5 + 3y}{2}\right) - 4y = -2$

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

$5 - y = -2$

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

$\frac{-y}{-1} = \frac{-7}{-1}$

$y = 7$

when $y = 7$

$x = \frac{5 + 3(7)}{2}$

$x = \frac{26}{2}$

$x = 13$

$\therefore y = 7, x = 13$

1. Roslind Jelui (051PP18F2011)

2. Clarinda Enthie (051PP18F2013)

KEMENTERIA PENDIDIKAN MALAYSIA — POLITEKNIK MALAYSIA JABATAN MATEMATIK, SAINS DAN KOMPUTER		COURSE CODE/ COURSE NAME		PBM1035 INTENSIVE MATHEMATICS
		COURSEWORK ASSESSMENT		END OF CHAPTER 1
		SESSION		DECEMBER 2018
		DURATION	60 MINS	CLO1 10 MARKS
NAME	Roslind Jelui			CLO2 8
REGISTRATION NO.	051PP18F2011			CLO3
PROGRAMME/ SECTION	IPP1	TOTAL MARKS		10 MARKS

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?

Question 1

a) $y = mx + c$

$y - c = mx + c - c$

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

$x = \frac{y - c}{m}$ 2

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

$y = mx + c$

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

$3 = 10 + c$

$3 - 10 = 10 - 10 + c$

$-7 = c$

$c = -7$ 2

Question 1

$2x - 3y = 5$ —— (1)

$2x - 4y = -2$ —— (2)

From (1)

$2x - 3y = 5$

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

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

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

Substitute (3) into (2);

$2x - 4y = -2$

$2\left(\frac{5}{2} + \frac{3y}{2}\right) - 4y = -2$

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

$5 - y = -2$

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

$\frac{-y}{-1} = \frac{-7}{-1}$

$y = 7$

when $y = 7$

$2x - 3y = 5$

$2x - 3(7) = 5$

$2x - 21 = 5$

$2x - 21 + 21 = 5 + 21$

$\frac{2x}{2} = \frac{26}{2}$ 13

$x = 13$

$\therefore x = 13, y = 7$

Question 3

$PV = P \times \frac{1-(1+R)^{-n}}{R}$

$PV = 2500 \times \frac{1-(1+0.02)^{-180}}{0.02}$

$PV = 2500 \times \frac{1 - 0.028311904}{0.02}$

$PV = 2500 \times \frac{0.971688096}{0.02}$

$PV = 2500 \times 48.5844048$

$PV = 121461.012$

Ainnurr Azryyatul Balqis

KEMENTERIA PENDIDIKAN MALAYSIA — POLITEKNIK MALAYSIA — JABATAN MATEMATIK, SAINS DAN KOMPUTER		COURSE CODE/ COURSE NAME		PBM1035 INTENSIVE MATHEMATICS
		COURSEWORK ASSESSMENT		END OF CHAPTER 1
		SESSION		DECEMBER 2018
NAME	Adriana Raphael	DURATION	60 MINS	CLO1 / 10 MARKS: 7
REGISTRATION NO.				CLO2
PROGRAMME/ SECTION	IPP1	TOTAL MARKS		CLO3 / 10 MARKS

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?

question 1

(a) $y = mx + c$

$y - c = mx + c - c$

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

$\frac{y-c}{m} = x$ ✓

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

$3 = -10 + c$

$3 - 10 = 10 + 10 + c$

$-7 = c$ ✓

question 2

$2x - 3y = 5$

$2x - 2x - 3y = 5 - 2x$

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

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

$y = -1x$

$2x - 4(-1) = -2$

$2x + 4 = -2$

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

$\frac{2x}{2} = \frac{-8}{2}$

$x = -4$

when $x = -4$

$y = -1(-4)$

$y = -5$

$x = -4, y = -5$

Question 3

$$PV = 2500 \times \frac{1 - (1+0.02)^{-180}}{0.02}$$

$$= 2500 \times \frac{1 - 0.028311904}{0.02}$$

$$= 2500 \times 48.58440048$$

$$= 121461.012$$

Question 2

$2x - 3y = 5$ — ①

$2x - 4y = -2$ — ②

$2x - 3y = 5$

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

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

$x = \frac{5}{2} + \frac{3y}{2}$ — ③

Substitude ③ into ②

$2\left(\frac{5}{2} + \frac{3y}{2}\right) - 4y = -2$

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

$5 - y = -2$

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

$\frac{-y}{-1} = \frac{7}{-1}$

$y = 7$

when $y = 7$

$2x - 4(7) = -2$

$2x - 28 = -2$

$2x - 28 + 28 = -2 + 28$

$\frac{2x}{2} = \frac{26}{2}$

$x = 13$

when $x = -1$, $y = 7$

calestina indica desmond.

KEMENTERIA PENDIDIKAN MALAYSIA — POLITEKNIK 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	CLO1	10 MARKS
NAME	ATIKAH ANAK SENJON			CLO2	3
REGISTRATION NO.	05IPP 18F 2012			CLO3	
PROGRAMME/ SECTION	IPP1	TOTAL MARKS		10 MARKS	

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?

Question 1.

$y = mx + c$

$y - c = mx$

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

$x = \frac{y-c}{m}$ (2)

b) $= -5, x = -2$ and $y = 3$.

$3 = -5x + -2$

$-5x + 2 - 2 = 3$

$-5x = 3 - 2$

$-5x = 1$

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

$x = -0.2$

Question 2.

$2)\ 2x - 3y = 5$ — (1)

$-\ 2x - 4y = -2$ — (2)

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

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

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

$y = 1$

$2x - 4(1) = -2$

$2x - 4 = -2$

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

$2x = 2$

$x = 1$

$\therefore y = 1, x = 1$

3) $A = P(1+r)^t$

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

$= 2500(.02)^{15}$

$= 3,364.670846$ *

3) $= 2500 \times \dfrac{1-(1+0.02)^{-180}}{0.02}$

$= 2500 \times \dfrac{1-0.028311904}{0.02}$

$= 2500 \times 48.5844048$

$= 121,461.012$

Dayang Tiyana
cathy sari

KEMENTERIA PENDIDIKAN MALAYSIA — POLITEKNIK MALAYSIA JABATAN MATEMATIK, SAINS DAN KOMPUTER		COURSE CODE/ COURSE NAME		PBM1035 INTENSIVE MATHEMATICS	
		COURSEWORK ASSESSMENT		END OF CHAPTER 1	
		SESSION		DECEMBER 2018	
		DURATION	60 MINS	CLO1	10 MARKS
NAME	Sandra Ipoh NO			CLO2	
REGISTRATION NO.	051PP18F2024			CLO3	
PROGRAMME/ SECTION	IPP1	TOTAL MARKS		10 MARKS	

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?

$I = 2500 \times 2 \times 15$

180 month.

Question 1

a) $y = mx + c$

$y = mx - mx + c$

$y - mx = c$

$y - y - mx = c - y$

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

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

a) $y = mx + c$

$y = mx + c - c$

$y - c = mx$

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

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

2

b) $y = mx + c$

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

$3 = 10 + c$

$3 = 10 - 10 + c$

$3 - 10 = c$

$c = -7$

2

Question 2

$2x - 3y = 5$

$2x - 4y = -2$

From ①

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

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

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

$x = 1\frac{1}{2}y + 2\frac{1}{2}$ — ②

$x = \frac{3}{2}y + \frac{5}{2}$ — ③

Substitute ③ into ②

$2\left(\frac{3}{2}y + \frac{5}{2}\right) - 4y = -2$

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

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

$3y - 4y = 7$

$\frac{-y}{-1} = \frac{7}{-1}$

$y = -7$

when $y = -7$

$x = \frac{3}{2}(-7) + \frac{5}{2}$

$x = -10\frac{1}{2} + \frac{5}{2}$

$x = -19 + \frac{5}{2}$

$x = -16\frac{+1}{\times 2}$

$x = -31$

$\therefore x = -31, y = -7$

Question 3

$I = \frac{2500 \times 2 \times 15}{100}$

$= \frac{75000}{100}$

$= 750$

$A = P(1 + r)^t$

$A = 2500(1 +$

~~present value = 2500~~

~~2500 x 2 x~~

$PV = 2500 \times \frac{1 - (1 + 0.02)^{-180}}{0.02}$

$= 2500 \times \frac{1 - 0.02831}{0.02}$

$= 250 \times \frac{0.97169}{0.02}$

$= 250 \times 48.5845$

$= 12146.125$

NAME: SITI MIRZAFIQAH
051PP18F2014

MELLINDA THEREDY
051PP18F2017

KEMENTERIA PENDIDIKAN MALAYSIA — POLITEKNIK MALAYSIA JABATAN MATEMATIK, SAINS DAN KOMPUTER		COURSE CODE/ COURSE NAME		PBM1035 INTENSIVE MATHEMATICS	
		COURSEWORK ASSESSMENT		END OF CHAPTER 1	
		SESSION		DECEMBER 2018	
		DURATION	60 MINS	CLO1	10 MARKS
NAME	Siti Mirzafiqah Bt Jamil			CLO2	2
REGISTRATION NO.	051PP18F2014			CLO3	
PROGRAMME/ SECTION	IPP1	TOTAL MARKS		10 MARKS	

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.

$$2x - 3y = 5 \quad -①$$
$$-) \; 2x - 4y = -2 \quad -②$$

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?

Question 1

a) $y = mx + c$

$y - mx = mx - mx + c$

$y - mx = c$

$\frac{x(y-m)}{y-m} = \frac{c}{y-m}$ ✓ ①

$x = \frac{c}{y-m}$ ✓

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

$3 = -5(-2) + c$ ✓

$3 = 10 + c$

$3 - c = 10 + c - c$

$3 - c = 10$

$3 + 3 - c = 10 + 3$ ✓ ①

$\frac{-1c}{-1} = \frac{13}{-1}$ ✓

$c = -13$ ✓

Question 2

$2x - 3y = 5$ — ①

$2x - 4y = -2$ — ②

$-7y = 3$ — ③

$\frac{-7}{-7} \quad \frac{3}{-7}$

Substitute ③ into ②

$2x - 4(-7) = -2$

$2x + 28 = -2$

$2x + 28 - 28 = -2 - 28$

$\frac{2x}{2} = \frac{-30}{2}$

$x = -15$

When $x = -15$

$y = -7 - (-75)$

$y = 8$

$\therefore x = -15, \; y = 8$

Question 3

Saving = RM2500

Rate = 2%

Time = 15 years

$I = \frac{2500 \times 2 \times 15}{100}$

$= \frac{75000}{100}$

$= 750$