

KEMENTERIA PENDIDIKAN MALAYSIA POLITEKNIK MALAYSIA JABATAN MATEMATIK, SAINS DAN KOMPUTER		COURSE CODE/ COURSE NAME		PBM1035 INTENSIVE MATHEMATICS	
		COURSEWORK ASSESSMENT		TEST 2	
		SESSION		DECEMBER 2018	
		DURATION	60 MINS	CLO1	10 MARKS
CLO2					
CLO3					
NAME		Christina Indira Desmond Able			
REGISTRATION NO.		651PP18F2029			
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, C1

Write each interval as an inequality.

- (a) $(-2, 7]$
(b) $(-\infty, 5)$

[4 marks]

Question 2

CLO1, C2

Solve for x which satisfy the inequality below:

$$2(x + 2) \leq -2(x - 1)$$

[4 marks]

Question 3

CLO1, C2

Simplify the expression and leave only positive indices in the answer.

$$\frac{(-a^4b)^3}{-a^4b^3}$$

[3 marks]

Question 4

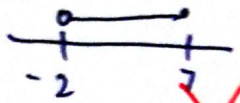
CLO1, C3

Calculate the following indices without using calculator.

$$8^{x-1} \div \frac{1}{32^x} = 16^{x+1}$$

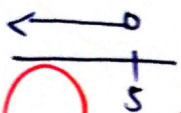
[4 marks]

$$1)] [-2, 7]$$



$$-2 \leq 7$$

$$2) (-\infty, 5)$$



$$-x < 5$$

$$3) 2(x+2) \leq -2(x-1)$$

$$= 2x+4 \leq -2x+2$$

$$= 2x+2x \leq 2+4$$

$$= 4x \leq 6$$

$$= \frac{4x}{4} \leq \frac{6}{4}$$

$$\text{so } x < \frac{6}{4}$$

$$3) \frac{(-a^4b)^3}{-a^4b^3}$$

$$= \frac{(-ab)^{12}}{-ab^{4-3}}$$

$$= \frac{(-ab)^{12}}{-ab^1}$$

$$= \frac{12}{1}$$

$$4) 8^{x-1} \div \frac{1}{32^x} = 16^{x+1}$$

$$= 8^{x-1}$$

$$= 8^{x-1} \div 22^{x+1} = 16^{x+1}$$

$$= 4 = 16^{x+1}$$

 KEMENTERIA PENDIDIKAN MALAYSIA		 POLITEKNIK MALAYSIA		COURSE CODE/ COURSE NAME		PHM1035 INTENSIVE MATHEMATICS	
JABATAN MATEMATIK, SAINS DAN KOMPUTER				COURSEWORK ASSESSMENT		TEST 2	
				SESSION		DECEMBER 2018	
				DURATION	60 MINS	CLO1	10 MARKS
CLO2							
CLO3							
NAME		Jessica anak Linggang		TOTAL MARKS		10 MARKS	
REGISTRATION NO.		051PP18P2007					
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, C1

[4 marks]

Write each interval as an inequality.

- (a) $(-2, 7]$
(b) $(-\infty, 5)$

Question 2

CLO1, C2

[4 marks]

Solve for x which satisfy the inequality below:

$$2(x + 2) \leq -2(x - 1)$$

Question 3

CLO1, C2

[3 marks]

Simplify the expression and leave only positive indices in the answer.

$$\frac{(-a^4b)^3}{-a^4b^3}$$

Question 4

CLO1, C3

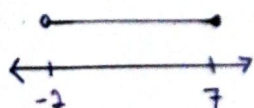
[4 marks]

Calculate the following indices without using calculator.

$$8^{x-1} \div \frac{1}{32^x} = 16^{x+1}$$

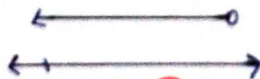
Question 1

a)



$(-2, 7]$

b)



$(-\infty, 5)$

~~Question 2~~

$$2(x+2) \leq -2(x-1)$$

$$2x+4 \leq -2x+2$$

$$2x+4-4 \leq -$$

Question 2

$$2(x+2) \leq -2(x-1)$$

$$2x + 4 \leq -2x + 2$$

$$2x + 4 \leq -2x + 2 - 4$$

$$2x \leq -2x + 2 - 4$$

$$2x \leq -2x + 2 - 4$$

$$2x - 2x \leq 2 - 4$$

$$2x \leq -2$$

$$\frac{2x}{2} \leq \frac{-2}{2}$$

$$x \leq -1$$

Question 3

$$(-a^4 b)^3$$

$$-a^4 b^3$$

$$(-1^4 1)^3$$

$$-1^4 1^3$$

Question 4

$$8^{x-1} \div \frac{1}{32}^x = 16^{x+1}$$

$$\frac{1}{8} \div \frac{1}{32}^x = 16^{x+1}$$

$$\frac{1}{8} \div \frac{1}{32} = 16^{x+1}$$

$$4 = 16^{x+1}$$

$$4 = 256$$

$$4 = 4^4$$

$$= 4$$

 KEMENTERIA PENDIDIKAN MALAYSIA  POLITEKNIK MALAYSIA JABATAN MATEMATIK, SAINS DAN KOMPUTER		COURSE CODE/ COURSE NAME		PBM1035 INTENSIVE MATHEMATICS	
		COURSEWORK ASSESSMENT		TEST 2	
		SESSION		DECEMBER 2018	
		DURATION	60 MINS	CLO1	10 MARKS
CLO2					
CLO3					
NAME	NAZMEEN AMISHA BT TALAMON		10 MARKS		
REGISTRATION NO.	051PP18 F 2010				
PROGRAMME/ SECTION	IPP1				
		TOTAL 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, C1

[4 marks]

Write each interval as an inequality.

- (a) $(-2, 7]$
(b) $(-\infty, 5)$

Question 2

CLO1, C2

[4 marks]

Solve for x which satisfy the inequality below:

$$2(x + 2) \leq -2(x - 1)$$

Question 3

CLO1, C2

[3 marks]

Simplify the expression and leave only positive indices in the answer.

$$\frac{(-a^4b)^3}{-a^4b^3}$$

Question 4

CLO1, C3

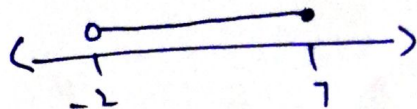
[4 marks]

Calculate the following indices without using calculator.

$$8^{x-1} \div \frac{1}{32^x} = 16^{x+1}$$

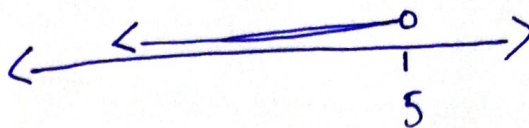
Question 1

a) $(-2, 7]$



$$-2 < 7$$

b) $(-\infty, 5)$



$$-\infty \leq 5$$

Question 2

$$2(m+2) \leq -2(m-1)$$

$$2m + 4 = -2m + 2$$

$$2m + 4 = -2m + 2m + 2$$

$$2m + 2m + 4 = 2$$

$$2m + 2m + 4 - 4 = 2 - 4$$

$$2m + 2m = 2 - 4$$

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

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

Question 4

$$8^{n-1} \div \frac{1}{32^n} = 16^{n+1}$$

$$8 \div \frac{1}{32} = 16^{2n}$$

Question 3

$$\frac{(-a^4b)^3}{-a^4b^3}$$

$$= \frac{-a^{4 \times 3} b^{1 \times 3}}{-a^4 b^3}$$

$$= \frac{-a^{12} b^3}{-a^4 b^3}$$

$$= -ab^{\frac{5}{7}}$$

 KEMENTERIA PENDIDIKAN MALAYSIA		 POLITEKNIK MALAYSIA		COURSE CODE/ COURSE NAME		PBM1035 INTENSIVE MATHEMATICS	
				COURSEWORK ASSESSMENT		TEST 2	
				SESSION		DECEMBER 2018	
						CLO1	10 MARKS
JABATAN MATEMATIK, SAINS DAN KOMPUTER				DURATION	60 MINS	CLO2	
NAME		Siti Mirzafiqah Bt Jamil				CLO3	
REGISTRATION NO.		05IPP18F2014					
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

[4 marks]

CLO1, C1

Write each interval as an inequality.

- (a) $(-2, 7]$
(b) $(-\infty, 5)$

Question 2

[4 marks]

CLO1, C2

Solve for x which satisfy the inequality below:

$$2(x + 2) \leq -2(x - 1)$$

Question 3

[3 marks]

CLO1, C2

Simplify the expression and leave only positive indices in the answer.

$$\frac{(-a^4b)^3}{-a^4b^3}$$

Question 4

[4 marks]

CLO1, C3

Calculate the following indices without using calculator.

$$8^{x-1} \div \frac{1}{32^x} = 16^{x+1}$$

Question 1

a) $(-2, 7]$

$-2 < x \leq 7$

b) $(-\infty, 5)$

$x < 5$

Question 2

$2(x + 2) \leq -2(x - 1)$

$2x + 4 \leq -2x + 2$

$2x + 4 \leq -2x + 2 - 4$

$2x \leq -2x - 2$

$2x + 2x \leq -2x + 2x - 2$

$\frac{4x}{4} \leq \frac{-2}{4}$

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

#

Question 3

$$(-a^4 b)^3$$

$$= -a^4 b^3$$

$$= -a^{12} b^3$$

$$= -a^4 b^3$$

$$= -a^{12-4} b^{3-3}$$

$$= -a^8 b^0$$

$$= -a^8$$

Question 4

$$8^{x+1} = \frac{1}{32^x} = 16^{x+1}$$

$$2^{3(x+1)} = \frac{1}{2^{5(x)}} = 2^{7(x+1)}$$

$$2^{3x+3} = 2^{-5x} = 2^{7x+7}$$

$$2^{3x+3} = 2^{-5x} = 2^{7x+7}$$

$$2^{-15x-3} = 2^{7x+7}$$

$$-15x-3 = 7x+7$$

$$-15x+15x-3 = 7x+7+15x$$

$$-3 = 22x+7$$

$$-3-7 = 22x+7-7$$

$$\frac{-10}{22} = \frac{22x}{22}$$

$$x = \frac{-10}{22}$$

$$x = \frac{-5}{11}$$

4

 KEMENTERIA PENDIDIKAN MALAYSIA		 POLITEKNIK MALAYSIA		COURSE CODE/ COURSE NAME		PBM1035 INTENSIVE MATHEMATICS	
				COURSEWORK ASSESSMENT		TEST 2	
JABATAN MATEMATIK, SAINS DAN KOMPUTER		SESSION		DECEMBER 2018		10 MARKS	
NAME	Celybia Chu	DURATION	60 MINS	CLO1			
REGISTRATION NO.	051PP18F2028			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

[4 marks]

CLO1, C1

Write each interval as an inequality.

- (a) $(-2, 7]$
- (b) $(-\infty, 5)$

Question 2

[4 marks]

CLO1, C2

Solve for x which satisfy the inequality below:

$$2(x + 2) \leq -2(x - 1)$$

Question 3

[3 marks]

CLO1, C2

Simplify the expression and leave only positive indices in the answer.

$$\frac{(-a^4b)^3}{-a^4b^3}$$

Question 4

[4 marks]

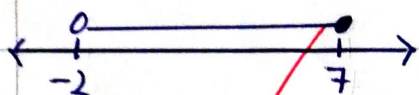
CLO1, C3

Calculate the following indices without using calculator.

$$8^{x-1} \div \frac{1}{32^x} = 16^{x+1}$$

(Question 1)

a) $[-2, 7]$



$-2 < x \leq 7$

b) $(-\infty, 5)$



$x < 5$

(Question 2.)

$$2(x+2) \leq -2(x-1)$$

$$2x+4 \leq -2x+2$$

$$2x+2x+4 \leq -2x+2x+2$$

$$4x+4 \leq 2$$

$$4x+4-4 \leq 2-4$$

$$\frac{4x}{4} \leq \frac{-2}{4}$$

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

(Question 3.)

$$\frac{(-a^4b)^3}{-a^4b^3}$$

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

$$= \frac{-12}{-7}$$

$$= \frac{12}{7}$$

$$= 12 - 7$$

$$= 5$$

(Question 4.)

$$8^{x-1} \div \frac{1}{32^x} = 16^{x+1}$$

 KEMENTERIA PENDIDIKAN MALAYSIA				COURSE CODE/ COURSE NAME		PBM1035 INTENSIVE MATHEMATICS			
				COURSEWORK ASSESSMENT		TEST 2			
				SESSION		DECEMBER 2018			
				DURATION	60 MINS	CLO1	10 MARKS		
NAME		Augustine Harrelson				CLO2	7		
REGISTRATION NO.		051PP18F2025				CLO3	5		
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, C1

Write each interval as an inequality.

[4 marks]

- (a) $(-2, 7]$
(b) $(-\infty, 5)$

Question 2

CLO1, C2

Solve for x which satisfy the inequality below:

[4 marks]

$$2(x + 2) \leq -2(x - 1)$$

Question 3

CLO1, C2

Simplify the expression and leave only positive indices in the answer.

[3 marks]

$$\frac{(-a^4b)^3}{-a^4b^3}$$

Question 4

CLO1, C3

Calculate the following indices without using calculator.

[4 marks]

$$8^{x-1} \div \frac{1}{32^x} = 16^{x+1}$$

Q1 (a) $(-2, 7]$

$= -2 < x \leq 7$

(b) $(-\infty, 5)$

$= -\infty < 5$

Q2 $2(x+2) \leq -2(x-1)$

$2x+4 \leq -2x+2$

$2x+2x+4 \leq -2x+2x+2$

$4x+4 \leq 2$

$4x+4-4 \leq 2-4$

$\frac{4x}{4} \leq \frac{-2}{4}$

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

$$Q3 \quad \frac{(-a^4b)^3}{-a^4b^3}$$

$$\frac{-3a^{12}3b}{-3a^{12}3b}$$

$$Q4 \quad 8^{x-1} \div \frac{1}{32^x} = 16^{x+1}$$

$$\frac{1}{8^x} \div \frac{1}{32^x} = 16^{x+1}$$

$$\frac{1}{8^x} \div \frac{1}{32^x} = 16^{x+1}$$

$$2^{3x-1} \div 2^{5x-1} = 16^{x+1}$$

$$2^{2x} \div 2^{4x} = 16^{x+1}$$

$$2^{2x-4x} = 16^{x+1}$$

$$2^{-2x} = 16^{x+1}$$

 KEMENTERIA PENDIDIKAN MALAYSIA		 POLITEKNIK MALAYSIA		COURSE CODE/ COURSE NAME		PBM1035 INTENSIVE MATHEMATICS	
				COURSEWORK ASSESSMENT		TEST 2	
				SESSION		DECEMBER 2018	
				DURATION	60 MINS	CLO1	10 MARKS
CLO2							
CLO3							
JABATAN MATEMATIK, SAINS DAN KOMPUTER				TOTAL MARKS		10 MARKS	
NAME		sandra ipoh na					
REGISTRATION NO.		051PP18F2024					
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, C1

Write each interval as an (inequality).

(a) $(-2, 7]$

(b) $(-\infty, 5)$

$(-2, 7]$

$x \geq 5$

$x < 5$

[4 marks]

Question 2

CLO1, C2

Solve for x which satisfy the inequality below:

$$2(x+2) \leq -2(x-1)$$

$$2x + 2x + 4 \leq 2$$

$$4x + 4 - 4 \leq 2 - 4$$

$$4x = -2$$

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

[3 marks]

Question 3

CLO1, C2

Simplify the expression and leave only positive indices in the answer.

$$\frac{(-a^4b)^3}{-a^4b^3}$$

$$(2^3)^{x-1} \div (2^5)^x = 16^{x+1}$$

Question 4

CLO1, C3

Calculate the following indices without using calculator

$$8^{x-1} \div \frac{1}{32^x} = 16^{x+1}$$

[4 marks]

Question 1

a) $-2 \geq 7$

b) $x < 5$

Question 2

$$2(x+2) \leq -2(x-1)$$

$$2x + 4 \leq -2x + 2$$

$$2x + 4 \leq -2x + 2x + 2$$

$$2x + 2x + 4 \leq 2$$

$$4x + 4 - 4 \leq 2 - 4$$

$$4x \leq -2$$

$$\frac{4x}{4} \leq \frac{-2}{4}$$

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

Question 3

$$\frac{(-a^4b)^3}{-a^4b^3}$$

$$= (-a^{4 \times 3} b^{1 \times 3})$$

$$= -a^{12} b^3$$

$$= -a^{12-4} b^{3-3}$$

$$= -a^8 b^0$$

$$= -a^8$$

Question 4

$$8^{x-1} \div \frac{1}{32^x} = 16^{x+1}$$

$$8^{x-1} \div 32^{-x} = 16^{x+1}$$

$$(2^3)^{x-1} \div (2^5)^{-x} = (2^4)^{x+1}$$

$$2^{3x-3} \div 2^{-5x} = 2^{4x+4}$$

$$2^{3x-3 - (-5x)} = 2^{4x+4}$$

$$2^{8x-3} = 2^{4x+4}$$

$$8x-3 = 4x+4$$

$$8x-3+3 = 4x+4+3$$

$$8x = 4x+7$$

$$8x = 4x - 4x + 7$$

$$8x - 4x = 7$$

$$\frac{4x}{4} = \frac{7}{4}$$

$$x = \frac{7}{4}$$

4

 KEMENTERIA PENDIDIKAN MALAYSIA 		COURSE CODE/ COURSE NAME		PBM1035 INTENSIVE MATHEMATICS	
		COURSEWORK ASSESSMENT		TEST 2	
		SESSION		DECEMBER 2018	
		DURATION	60 MINS	CLO1	10 MARKS
CLO2					
CLO3					
JABATAN MATEMATIK, SAINS DAN KOMPUTER		TOTAL MARKS		10 MARKS	
NAME	Bronica Bida at chundou		13		
REGISTRATION NO.	051 PPI 8 F 2003				
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, C1

[4 marks]

Write each interval as an inequality.

- (a) $(-2, 7]$
(b) $(-\infty, 5)$

Question 2

CLO1, C2

[4 marks]

Solve for x which satisfy the inequality below:

$$2(x + 2) \leq -2(x - 1)$$

Question 3

CLO1, C2

[3 marks]

Simplify the expression and leave only positive indices in the answer.

$$\frac{(-a^4b)^3}{-a^4b^3}$$

Question 4

CLO1, C3

[4 marks]

Calculate the following indices without using calculator.

$$8^{x-1} \div \frac{1}{32^x} = 16^{x+1}$$

Question 1

a) $(-2, 7]$

$-2 < x \leq 7$

b) $(-\infty, 5)$

$5 < x$

✓ (2)

Question 2

$2(x+2) \leq -2(x-1)$

$2x+4 \leq -2x+2$

$2x+4-4 \leq -2x+2-4$

$2x+2x \leq -2x+2x+2-4$

$\frac{4x}{4} \leq \frac{-2}{4}$

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

✓ (4)

Question 3

$\frac{(-a^4 b)^3}{-a^4 b^3}$

$= \frac{-a^{4 \times 3} b^3}{-a^4 b^3}$

$= a^{12-4} b^{3-3}$

$= a^8 b^0$

$= a^8 1$
✓ $= a^8$

(3)

Question 4

$8^{x-1} \div \frac{1}{32}x = 16^{x+1}$

$= (2^3)^{x-1} \div \frac{1}{(2^5)^x} = (2^3)^{x+1}$

$= 2^{3x-3} \div 2^{-5x} = 2^{4x+4}$

$= 3x-3 = (-5x) = 4x+4$

$= 3x-3+5x = 4x+4$

$= 3x+5x-4x-3 = 4x-4+4$

$= 4x-3+5 = 4+3$

$\frac{4x}{4} = \frac{7}{4}$

$x = \frac{7}{4}$
✓ (4)

 KEMENTERIA PENDIDIKAN MALAYSIA		 POLITEKNIK MALAYSIA		COURSE CODE/ COURSE NAME		PBM1035 INTENSIVE MATHEMATICS	
				COURSEWORK ASSESSMENT		TEST 2	
				SESSION		DECEMBER 2018	
				DURATION		60 MINS	CLO1
NAME		Dayang Liyana Syazwani				CLO2	
REGISTRATION NO.		051P18P2021				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

[4 marks]

CLO1, C1

Write each interval as an inequality.

- (a) $(-2, 7]$
(b) $(-\infty, 5)$

Question 2

[4 marks]

CLO1, C2

Solve for x which satisfy the inequality below:

$$2(x + 2) \leq -2(x - 1)$$

Question 3

[3 marks]

CLO1, C2

Simplify the expression and leave only positive indices in the answer.

$$\frac{(-a^4b)^3}{-a^4b^3}$$

Question 4

[4 marks]

CLO1, C3

Calculate the following indices without using calculator.

$$8^{x-1} \div \frac{1}{32^x} = 16^{x+1}$$

a) Question 1

$$a) -2 \leq 7$$

$$b) x < 5$$

Question 2

$$2(x+2) \leq -2(x-1)$$

$$2x+4 \leq -2x+2$$

$$2x+2x+4 \leq -2x+2x+2$$

$$4x+4 \leq 2$$

$$4x+4 \div 4 \leq 2-4$$

$$\frac{4x}{4} \leq \frac{-2}{4}$$

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

Question 3

$$(-a^4 b)^3$$

$$\frac{-a^4 b^3}{-a^4 b^3}$$

$$= \frac{(-a^{12} b^3)}{-a^4 b^3}$$

$$= a^{12-4} b^{3-3}$$

$$= a^8 b^0$$

$$= a^8$$

Question 4

$$8^{x-1} \div \frac{1}{32}^x = 16^{x+1}$$

$$= 2^{3(x-1)} \div 2^{5(-x)} = 2^{4(x+1)}$$

$$= 3x-3-5x = 4x+4$$

$$= 3x+5x-3 = 4x-4x+4$$

$$= 8x-4x-3 = 4$$

$$= 4x-3 = 4$$

$$= 4x-3 \div +3 = 4+3$$

$$= \frac{4x}{4} = \frac{7}{4}$$

$$x = \frac{7}{4}$$