



KEMENTERIAN
PENDIDIKAN
MALAYSIA



JABATAN MATEMATIK, SAINS DAN KOMPUTER

		COURSE CODE/ COURSE NAME		PBM1035 INTENSIVE MATHEMATICS
		COURSEWORK ASSESSMENT		TUTORIAL 3
		SESSION		DECEMBER 2018
		DURATION	CLO1	10 MARKS
NAME	SYUHADAH AQILAH		CLO2	
REGISTRATION NO.	OS#IPPI6F2002		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

CL01, C1

- (a) Fill in missing index number.

$$2^{\underline{4}} \times 2^4 \div 2^5 = 2^{10}$$

[1 mark]

CL01, C2

- (b) Simplify the indices in the lowest form.

$$8 \times (8^2)^4 \div 8^3$$

[2 marks]

Question 2

CL01, C1

- (a) Rewrite the expression as single exponent.

$$\underline{19^2} \times 19^0 \div 19^4$$

[1 mark]

CL01, C2

- (b) Simplify the following indices in the lowest form.

$$\frac{2^{n+2} \times 4^{3-2n}}{8^{3n}}$$

[3 marks]

Question 3

CL01, C3

Calculate the following without using calculator.

$$3^{x-2} = 27^{x+4}$$

[3 marks]

Q1
(a)

$$2^x \times 2^{4-5} = 2^{10}$$

(1)

$$x-1 = 10$$

$$x-1+1 = 10+1$$

$$x = 11$$

$$2^x \times 2^4 \div 2^5 = 2^{10}$$

$$\begin{aligned}
 & (b) 8 \times (8^2)^4 \div 8^3 \\
 &= 8 \times 8^8 \div 8^3 \\
 &= 1 + 8 - 3 \\
 &= 6 \#
 \end{aligned}$$

$$Q2(a) 19^2 \times 19^0 \div 19$$

$$= 19^2 + 0 - 4$$

$$= 19^{-2} \quad \text{X} \quad \text{X}$$

$$= \frac{1}{19^2} \quad \text{X} \quad \text{X}$$

$$Q2(b)$$

$$\frac{2^{n+2} \times 4^{3-2n}}{8^{3n}}$$

$$2 \times 2 = 4^2$$

$$4 \div 2 = 2^2$$

$$\frac{2^{n+2} \times (4^2)^{3-2n}}{(2^3)^{3n}}$$

$$\frac{2^{n+2} \times 2^{6-4n}}{2^{9n}}$$

$$= \frac{2}{2^{9n}} \quad \text{X}$$

$$Q3 \quad 3^{x-2} = 27^{x+4}$$

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

$$3^{x-2} = 3^{3x+12}$$

$$x-2 = 3x+12$$

$$x-2+2 = 3x+12+2$$

$$x = 3x+14$$

$$x-3x = 3x-3x+14$$

$$\frac{-2x}{-2} = \frac{14}{-2} \quad \Rightarrow x = -7 \quad \text{X}$$

✓(1)



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JABATAN MATEMATIK, SAINS DAN KOMPUTER

NAME	SANDRA IPOH NO
REGISTRATION NO.	051PP10F 2024
PROGRAMME/ SECTION	IPP1

COURSE CODE/ COURSE NAME		PBM1035 INTENSIVE MATHEMATICS	
COURSEWORK ASSESSMENT		TUTORIAL 3	
SESSION		DECEMBER 2018	
DURATION	60 MINS	CLO1	10 MARKS
		CLO2	
		CLO3	
		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

CL01, C1

- (a) Fill in missing index number.

$$2^{\square} \times 2^4 \div 2^5 = 2^{10}$$

[1 mark]

CL01, C2

- (b) Simplify the indices in the lowest form.

$$8 \times (8^2)^4 \div 8^3$$

[2 marks]

Question 2

CL01, C1

- (a) Rewrite the expression as single exponent.

$$19^2 \times 19^0 \div 19^4$$

[1 mark]

CL01, C2

- (b) Simplify the following indices in the lowest form.

$$\frac{2^{n+2} \times 4^{3-2n}}{8^{3n}}$$

[3 marks]

Question 3

CL01, C3

Calculate the following without using calculator.

[3 marks]

Question 1

$$\begin{aligned} a) \quad & 2^x \times 2^4 \div 2^5 = 2^{10} \\ - & 2^x \times 2^{4-5} = 2^{10} \\ - & 2^x \times 2^{-1} = 2^{10} \quad (1) \\ - & 2x - 1 = 10 \\ - & 2x - 1 + 1 = 10 + 1 \\ - & 2x = 11 \end{aligned}$$

b)

$$\begin{aligned} & 8 \times (8^2)^4 \div 8^3 \\ & = 8 \times 8^{2 \times 4} \div 8^3 \\ & = 8 \times 8^8 \div 8^3 \\ & = 8 \times 8^5 \\ & = 8^{1+5} \\ & = 8^6 \end{aligned}$$

Question 2

$$\begin{aligned} a) \quad & 19^2 \times 19^0 \div 19^4 \\ & = 19^{2+0-4} \\ & = 19^{-2} \quad (1) \\ & = \frac{1}{19^2} \end{aligned}$$

$$\begin{aligned} b) \quad & \frac{2^{n+2} \times 4^{3-2n}}{8^{3n}} \\ & = \frac{2^{n+2} \times (2^2)^{3-2n}}{(2^3)^{3n}} \\ & = \frac{2^{n+2} \times 2^{6-4n}}{2^{9n}} \\ & = 2^{n+2+6-4n} \\ & = 2^{-3n+8-9} \\ & = 2^{-12n+8} \end{aligned}$$

Question 3

$$3^{x-2} = 27^{x+4}$$

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

$$3^{x-2} = 3^{3x+12}$$

$$x-2 = 3x+12$$

$$x-2 = 3x - 3x + 12$$

$$x-3x-2 = 12$$

$$-2x-2+2 = 12+2$$

$$\frac{-2x}{-2} = \frac{14}{-2}$$

$$x = -7$$

3

KEMENTERIAN PENDIDIKAN MALAYSIA	POLITEKNIK MALAYSIA	COURSE CODE/COURSE NAME	PBM1035 INTENSIVE MATHEMATICS
JABATAN MATEMATIK, SAINS DAN KOMPUTER		COURSEWORK ASSESSMENT	TUTORIAL 3
NAME	Celybia Chu Wei Jyi	SESSION	DECEMBER 2018
REGISTRATION NO.	05IPPI8F2028	DURATION	60 MIN
PROGRAMME/ SECTION	IPPI	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

CL01, C1

[1 mark]

- (a) Fill in missing index number.

$$2^{\underline{n}} \times 2^4 \div 2^5 = 2^{10}$$

CL01, C2

[2 marks]

- (b) Simplify the indices in the lowest form.

$$8 \times (8^2)^4 \div 8^3$$

Question 2

CL01, C1

[1 mark]

- (a) Rewrite the expression as single exponent.

$$19^2 \times 19^0 \div 19^4$$

CL01, C2

[3 marks]

- (b) Simplify the following indices in the lowest form.

$$\frac{2^{n+2} \times 4^{3-2n}}{8^{3n}}$$

Question 3

CL01, C3

[3 marks]

Calculate the following without using calculator.

$$3^{x-2} = 27^{x+4}$$

Question 1
 $x+4-5=10$
 $x-1=10+1$
 $x=11$

(b) $8 \times (8^2)^4 \div 8^3$
 $= 8^1 + 8^{-3}$
 $= 8^6$

Question 3

$$3^{x-2} = 27^{x+4}$$

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

$$3^{x-2} = 3^{3x+12}$$

$$x-2 = 3x+12$$

$$x-2+2 = 3x+12+2$$

$$x-3x = 3x+14$$

$$-2x = 3x-3x+14$$

$$\frac{-2x}{-2} = \frac{14}{-2}$$

$$x = -7$$

Question 2
 $19^2 \times 19^0 \div 19^4$
 $= 19^{2+0-4}$
 $= 19^{-2}$
 $= \frac{1}{19^2}$

(b) $\frac{2^{n+2} \times 4^{3-2n}}{8^{3n}}$
 $= \frac{2^{n+2} \times (2^2)^{3-2n}}{(2^3)^{3n}}$
 $= \frac{2^{n+2} \times 2^{6-4n}}{2^{9n}}$
 $= 2^{n+2+6-4n-9n}$
 $= 2^{6-9n+2+6}$
 $= 2^{12n+8}$



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JABATAN MATEMATIK, SAINS DAN KOMPUTER

NAME	Jessica ak Ling gang		COURSE CODE/ COURSE NAME	PBM1035 INTENSIVE MATHEMATICS	
REGISTRATION NO.	05IPP18F2007		COURSEWORK ASSESSMENT	TUTORIAL 3	
PROGRAMME/ SECTION	IPP1		SESSION	DECEMBER 2018	
DURATION	60 MINS	CLO1	10 MARKS		
		CLO2			
		CLO3			
		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

- (a) Fill in missing index number.
 $2^{\underline{4}} \times 2^4 \div 2^5 = 2^{10}$

[1 mark]

CLO1, C2

- (b) Simplify the indices in the lowest form.

[2 marks]

$$8 \times (8^2)^4 \div 8^3$$

Question 2

CLO1, C1

- (a) Rewrite the expression as single exponent.

$$19^2 \times 19^0 \div 19^4$$

[1 mark]

CLO1, C2

- (b) Simplify the following indices in the lowest form.

$$\frac{2^{n+2} \times 4^{3-2n}}{8^{3n}}$$

[3 marks]

Question 3

CLO1, C3

Calculate the following without using calculator.

$$3^{x-2} = 27^{x+4}$$

[3 marks]

QUESTION 1
 $x+4-5=10$
 $x=10+1$
 $x=11$

QUESTION 2.

$$\begin{aligned} a) 19^2 \times 19^0 \div 19^4 \\ = 19^{(2+0-4)} \\ = 19^{-2} \end{aligned}$$

$$\begin{aligned} b) 8 \times 8^3 \div 8^3 \\ = 8(1+3-3) \\ = 8^6 \end{aligned}$$

$$\begin{aligned} b) \frac{2^{n+2} \times 4^{3-2n}}{8^{3n}} \\ = \frac{2^{n+2} \times 2^{2(3-2n)}}{2^{3(3n)}} \\ = 2^{(n+2)+(6-4n)-9n} \\ = 2^{(n-4n-9n)+2+6} \\ = 2^{-12n+8} \\ = 2^{8-12n} \end{aligned}$$

QUESTION 3

$$\begin{aligned} a) 3^{x-2} &= 27^{x+4} \\ &= 3^{x-2} = 3^{(x+4)} \end{aligned}$$

$$x-2 = 3x+12$$

$$3x+12 = x-2$$

$$3x-x = -2-12$$

$$\frac{2x}{2} = \frac{-14}{2}$$

$$x = -7$$



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Nurul

		COURSE CODE/ COURSE NAME		PBM1035 INTENSIVE MATHEMATICS	
		COURSEWORK ASSESSMENT		TUTORIAL 3	
		SESSION		DECEMBER 2018	
		DURATION	60 MINS	CLO1	10 MARKS
NAME	Nurul Bina bt Amed			CLO2	
REGISTRATION NO.	05IPPI18F2016			CLO3	
PROGRAMME/ SECTION	IPPI1	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

CL01, C1

[1 mark]

- (a) Fill in missing index number.

$$2^{\square} \times 2^4 \div 2^5 = 2^{10}$$

CL01, C2

[2 marks]

- (b) Simplify the indices in the lowest form.

$$8 \times (8^2)^4 \div 8^3$$

Question 2

CL01, C1

[1 mark]

- (a) Rewrite the expression as single exponent.

$$19^2 \times 19^0 \div 19^4$$

CL01, C2

[3 marks]

- (b) Simplify the following indices in the lowest form.

$$\frac{2^{n+2} \times 4^{3-2n}}{8^{3n}}$$

Question 3

CL01, C3

[3 marks]

Calculate the following without using calculator.

Question 1

$$a) 2^{\square} \times 2^4 \div 2^5 = 2^{10}$$

$$\cancel{A} \times -1 = 10$$

$$x + 1 = 10$$

$$x = 11$$

$$2^{\square} \times 2^4 \div 2^5 = 2^{10}$$

$$\begin{aligned} b) 8 \times (8^2)^4 \div 8^3 &= 8^{1+2(4)-3} \\ &= 8^6 \end{aligned}$$

$$3^{x-2} = 27^{x+4}$$

Question 2

$$a) 19^2 \times 19^0 \div 19^4$$

$$= 19^{2+0-4}$$

$$= 19^{-2}$$

$$= \frac{1}{19^2}$$

$$\cancel{x} \quad \cancel{x}$$

$$\begin{aligned} b) \frac{2^{n+2} \times 4^{3-2n}}{8^{3n}} &= \frac{2^{n+2} \times 2^{6-4n}}{2^{3(2n)}} \\ &= \frac{2^{n+2} \times 2^{6-4n}}{2^{6n}} \\ &= 2^{n+2+(6-4n)-6n} \\ &= 2^{n+2+(6-4n)-6n} \end{aligned}$$

Question 3.

$$3^{x-2} = 27^{x+4}$$

$$3^{x-2} = 3^{3x+12}$$

$$x-2 = 3x+12$$

$$\frac{2x}{x} = -14$$

$$= -7$$

3

KEMENTERIAN PENDIDIKAN MALAYSIA	POLITEKNIK MALAYSIA	COURSE CODE / COURSE NAME	PBM1035 INTENSIVE MATHEMATICS	
JABATAN MATEMATIK, SAINS DAN KOMPUTER			TUTORIAL 3	
NAME	(electra inaica)		SESSION	DECEMBER 2018
REGISTRATION NO.	051PP18FD029		DURATION	60 MINS
PROGRAMME/ SECTION	IPP1	TOTAL MARKS	CLO1	10 MARKS
			CLO2	
			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

CL01, C1

[1 mark]

- (a) Fill in missing index number.

$$2^{\square} \times 2^4 \div 2^5 = 2^{10}$$

CL01, C2

[2 marks]

- (b) Simplify the indices in the lowest form.

$$8 \times (8^2)^4 \div 8^3$$

Question 2

CL01, C1

[1 mark]

- (a) Rewrite the expression as single exponent.

$$19^2 \times 19^0 \div 19^4$$

CL01, C2

[3 marks]

- (b) Simplify the following indices in the lowest form.

$$\frac{2^{n+2} \times 4^{3-2n}}{8^{3n}}$$

Question 3

CL01, C3

[3 marks]

Calculate the following without using calculator.

$$3^{x-2} = 27^{x+4}$$

$$\begin{aligned}
 a) 2^{\square} \times 2^4 \div 2^5 &= 2^{10} \\
 2^{\square} &= 2^{10} - 4 \\
 &= 2^6 \\
 b) 8 \times (8^2)^4 \div 8^3 &= 8^1 \times 8^8 \div 8^3 \\
 &= 8^{(1+8)-3} \\
 &= 8^6
 \end{aligned}$$

$$\begin{aligned}
 5) \frac{2^{n+2} \times 4^{3-2n}}{8^{3n}} &= \frac{2^{n+2} \times (2^2)^{3-2n}}{(2^3)^{3n}} \\
 &= \frac{2^{n+2} \times 2^{6-4n}}{2^{9n}}
 \end{aligned}$$

$$\begin{aligned}
 3a) 3^{x-2} &= 27^{x+4} \\
 3^{x-2} &= 3^{3x+12} \\
 x-2 &= 3x+12 \\
 -3x-2 &= 12 \\
 -2x &= 12+2 \\
 -2x &= 14 \\
 x &= -7
 \end{aligned}$$



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JABATAN MATEMATIK, SAINS DAN KOMPUTER

		COURSE CODE/ COURSE NAME		PBM1035 INTENSIVE MATHEMATICS
		COURSEWORK ASSESSMENT		TUTORIAL 3
		SESSION		DECEMBER 2018
NAME	MELLINA THERENY	DURATION	60 MINS	CLO1 10 MARKS
REGISTRATION NO.	051PP18F2019			CLO2
PROGRAMME/ SECTION	IPP1			CLO3
				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

CL01, C1

- (a) Fill in missing index number.

$$\underline{2} \times 2^4 \div 2^5 = 2^{10}$$

[1 mark]

CL01, C2

- (b) Simplify the indices in the lowest form.

$$8 \times (8^2)^4 \div 8^3$$

[2 marks]

Question 2

CL01, C1

- (a) Rewrite the expression as single exponent.

$$19^2 \times 19^0 \div 19^4$$

[1 mark]

CL01, C2

- (b) Simplify the following indices in the lowest form.

$$\frac{2^{n+2} \times 4^{3-2n}}{8^{3n}}$$

[3 marks]

Question 3

CL01, C3

Calculate the following without using calculator.

$$3^{x-2} = 27^{x+4}$$

[3 marks]

Now!
Question 1.

$$\begin{aligned} a). & 2^{\underline{x}} \times 2^4 \div 2^5 = 2^{10} \\ & = 2^{\underline{n}} \times 2^4 \div 2^5 = 2^{10} \\ & = 2^{11-4-5} = 2^{10} \end{aligned}$$

$$\begin{aligned} b). & 8 \times (8^2)^4 \div 8^3 \\ & = 8 \times 8^{\underline{2 \times 4}} \div 8^3 = 8 \times 8^8 \div 8^3 \\ & = 8^{\underline{8}} \times 8^8 \div 8^3 = 8^{\underline{1+8}} \div 8^3 = 8^9 \div 8^3 \\ & = 8^{\underline{9-3}} = 8^6 \end{aligned}$$

Question 2

$$\begin{aligned} a). & 19^{\underline{2}} \times 19^0 \div 19^{\underline{4}} = 19^{\underline{-2}} \\ & = 19^{\underline{2+0-4}} = 19^{\underline{-2}} = 19^{\underline{1}} = 19^{\underline{2}} \end{aligned}$$

$$\begin{aligned} b). & \frac{2^{\underline{n+2}} \times 4^{\underline{3-2n}}}{8^{\underline{3n}}} \\ & = \frac{2^{\underline{n+2}} \times (2^{\underline{2}})^{\underline{3-2n}}}{8^{\underline{3n}}} = \frac{(2^{\underline{3}})^{\underline{3n}}}{(2^{\underline{3}})^{\underline{3n}}} = 1 \end{aligned}$$

Question 3.

$$\begin{aligned} & \frac{3^{\underline{x-2}}}{3^{\underline{-2+}}}=27^{\underline{x+4}} \\ & = 3^{\underline{n+2}} \times 2^{\underline{-2+}}=27^{\underline{x+4}} \\ & = 3^{\underline{n+2}} \times 2^{\underline{6-11}}=27^{\underline{x+4}} \\ & = 3^{\underline{n+2}} \times 2^{\underline{-3n+8-9n}}=27^{\underline{x+4}} \\ & = 3^{\underline{n+2}} \times 2^{\underline{-12n+8}}=27^{\underline{x+4}} \end{aligned}$$

$$= 2^{\underline{-12n+8}}$$

$$= 2^{\underline{-12n+8}}$$

Question 3

$$3^{x-2} = 27^{x+4}$$

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

$$3^{x-2} = 3^{3x+12}$$

$$x-2 = 3x+4$$

$$x-3x-2 = 3x-3x+4$$

$$x-3x-2+2 = 4+2$$

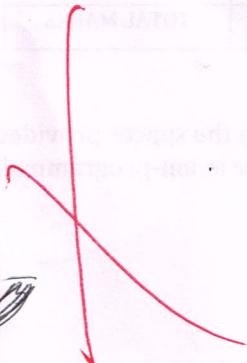
$$\frac{-2x}{-2} = \frac{6}{-2}$$

~~cancel~~

$$x = -3$$

~~cancel~~

$$x = \frac{1}{-3}$$



(n)

SATURDAY 28 AUGUST 2021

1439H 1411H

PJSF8199120

MONDAY 30 AUGUST 2021

Lesson 8

Untuk setiap nilai yang diberikan pada persamaan berikut, tentukan nilai yang memenuhi syarat-syarat.

1) $x^2 - 5x + 6 > 0$

2) $x^2 - 4x + 4 < 0$

3) $x^2 + 4x - 5 < 0$

Lesson 9

Tuliskan hasil kali dua bilangan yang merupakan faktor-faktor

8 \times 8 = 64

4 \times 16 = 64

2 \times 32 = 64

1 \times 64 = 64

1) $b = c^2 + 8cx$

$b = c^2 + 8c(c+2)$

$b = c^2 + 8c^2 + 16c$

$b = 9c^2 + 16c$

$b = (3c+4)^2$

2) $b = c^2 + 8cx$

$b = c^2 + 8c(c-2)$

$b = c^2 + 8c^2 - 16c$

$b = 9c^2 - 16c$

$b = (3c-4)^2$