

MODUL 5
SKIM TUISYEN FELDA (STF) MATEMATIK SPM “ENRICHMENT”
TOPIC : INEQUALITIES
MASA : 1 JAM

- 1 On the graph provided, shade the region which satisfies the three inequalities
, and.

[3 marks]

Answer:

$$\begin{array}{c} y \\ x \\ y = x + 3x + 12 \\ O \\ y = x + 4 \end{array}$$

2. On the graph in the answer space, shade the region which satisfies the three
inequalities and .

[3 marks]

Answer :

O
x
y

- 3 On the graph, shade the region that satisfies all three inequalities :
 $y > x$, $x + y \leq 5$ and $x \geq 0$. [3 marks]

$$x + y = 5$$

Answer :

y						
5						
4						
3						
2						
1						
0	1	2	3	4	5	x

1. On the graph in the answer space, draw the line $x + y = 3$. Hence, shade the region which satisfies the three inequalities
 $x + y \geq 3$, $2y - x \leq 4$ and $x \leq 4$

x
y
2
4

6
 -2
 -4
 -2
 -4
 2
 4
 $X = -2$

$$2y - x = -6$$

2. On the graph in the answer space, shade the region which satisfies the three inequalities $y \geq 3x$, $2y \leq x$ and $y + x \leq 6$.

3
 6
 y
 x
 3
 $2y = x$
 6
 $y = 3x$

3. Draw the line $2x + y = 6$. Hence, shade the region which satisfies the three inequalities $y \geq 3$, $2x + y \leq 6$ and $x + y \leq 6$.

y
 x
 3
 6
 3
 $y + x = 6$
 $y = 3$
 6

x
 10
 $2x + y = 10$
 5
 10
 $2x + 5y = 20$
 y

4. Find the three inequalities which satisfy the shaded region in the diagram below.

1	Lukis garis lurus putus-putus $y = x - 4$ (garis lurus dilihat) y $y = x - 4$ x $y = -4$ $y = -3x + 12$	1	
		2	3

2	R y x		

	Straight line drawn correctly. Region shaded correctly. <u>Notes:</u> 1. Region satisfies two inequalities give P1. 2. Deduct one mark from K1P2 if is a solid line.	1 2	3
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3									
	y								
	5								
	4				y = x				
	3								
	2					x + y = 5			
	1								
	0	1	2	3	4	5	x		
	Garis $y = x$ dilukis dengan betul Rantau dilorek dengan betul (Tolak 1 markah daripada K1P2 jika $y = x$ garis penuh)							1 2	3