

JAWAPAN KERTAS 2 SET 6

1. $x = -6, y = -\frac{2}{3}$; $x = 5, y = 3$

2.

x	1	2	3	4	5	6
y	4.68	7.12	11.04	16.53	25.56	40.01
$\log_{10} y$	0.67	0.85	1.04	1.22	1.41	1.60

Best fit - 1 markah

Skala betul - 1 markah

Titik di plot dengan baik – 1 m

$$y = pk^x$$

$$\log y = \log p + \log k (x)$$

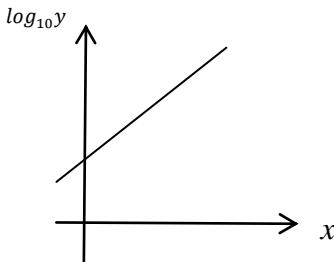
(i) $\log p = 0.48$

$$p = 3.02$$

$$(\text{ii}) \log k = \frac{1.04 - 0.67}{3 - 1}$$

$$= 0.185$$

$$k = 1.5311$$



3. (a) (i) $x = 125$ (ii) $y = 4.50$ (iii) $z = 2.50$

(b) Indeks gubahan = 126.8

(c) RM63.40

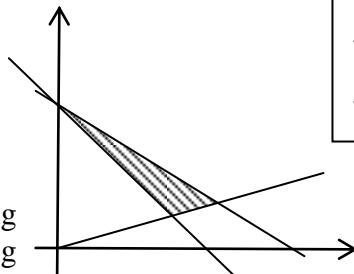
(d) 145.82

4. I: $x + y \geq 50$

II: $3y \geq x$

III: $3x + 4y \leq 200$

1 markah
- 1 garis betul
1 markah
- semua garis betul
1 markah
- rantau



(i) bilangan maksimum = 33 orang
bilangan minimum = 25 orang

(ii) $90(37) + 120(13) = \text{RM}4\,890$

5. (a) 22.5 (b) C (5, 4) (c) $4x^2 + 4y^2 - 95x - 43y + 548 = 0$

6. (a) (i) $7\underline{a} - 7\underline{b}$ (ii) $\frac{7}{2}\underline{a} - \frac{7}{2}\underline{b}$ (iii) $\frac{9}{2}\underline{a} + \frac{1}{2}\underline{b}$

(b) $(8 + 2k)\underline{a} - 4\underline{b}$

(c) $k = -22$