

$$(2a-6b \quad 4a+10b) = (-26 \quad -8)$$

$$\cdot 6 = 2c$$

$$c = 3$$

$$\cdot 2a - 6b = -26 \quad | \times 2 \quad | \quad 4a - 12b = -52$$

$$4a + 10b = -8 \quad | \times 1 \quad | \quad 4a + 10b = -8$$

$$\underline{-22b = -44}$$

$$b = 2$$

$$b = 2 \rightarrow 4a + 10b = -8$$

$$4a = -8 - 20$$

$$a = -7$$

$$a + b + c = -7 + 2 + 3 = -2$$

$$(12) \quad x + 4y = 1200$$

$$x + y = 600$$

$$3y = 600$$

$$y = 200$$

$$y = 200 \rightarrow x + y = 600$$

$$x = 400$$

$$x = 400, y = 200 \rightarrow x + 2y$$

$$400 + 400 = 800$$

$$(13) \quad a + a + b + a + 2b + a + 3b + a + 4b = 100$$

$$5a + 10b = 100$$

$$a + 2b = 20 \quad \dots (1)$$

$$a + 5b + a + 6b + a + 7b = 132$$

$$3a + 18b = 132 \quad \dots (2)$$

Pers. (1) dan (2)

$$3a + 18b = 132$$

$$3a + 6b = 60$$

$$\underline{12b = 72}$$

$$b = 6$$

$$b = 6 \rightarrow a + 2b = 20$$

$$a = 20 - 12 = 8$$

$$U_1 + U_2 + U_3$$

$$a + a + b + a + 2b = 8 + 8 + 6 + 8 + 12 = 42$$

$$(15) \quad {}^5 \log 90 = \frac{{}^5 \log 90}{{}^5 \log 75} = \frac{{}^5 \log 3^2 \cdot 2 \cdot 5}{{}^5 \log 5^2 \cdot 3} = \frac{{}^5 \log 3^2 + {}^5 \log 2 + {}^5 \log 5}{{}^5 \log 5^2 + {}^5 \log 3}$$

$$= \frac{2b + \frac{1}{a} + 1}{2 + b} = \frac{2ab + 1 + a}{a(2 + b)}$$

$$= \frac{2ab + a + 1}{a(2 + b)} = \frac{a + 2ab + 1}{a(b + 2)}$$

$$x^2 - 2ax + 8b = 0$$

$$\text{Interval } -4 < x < 8 \rightarrow (x+4)(x-8) = 0$$

$$x^2 - 4x - 32 = 0$$

$$\cdot -2a = -4$$

$$a = 2$$

$$\cdot 8b = -32$$

$$b = -4$$

$$a - b = 2 - (-4) = 6$$

$$(48) \quad \cos \theta = \frac{\vec{a} \cdot \vec{b}}{|\vec{a}| |\vec{b}|}$$

$$\cos \frac{\pi}{4} = \frac{2k + \frac{5}{2}}{\sqrt{\frac{17}{4}} \cdot \sqrt{k^2 + 25}}$$

$$\frac{1}{4} \cdot 2 = \frac{4k^2 + 10k + \frac{25}{4}}{\frac{\pi}{4} (k^2 + 25)}$$

$$\frac{17}{4} k^2 + 425 = 32k^2 + 80k + 50$$

$$15k^2 + 80k - 375 = 0$$

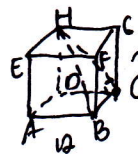
$$3k^2 + 16k - 75 = 0$$

$$(3k + 25)(k - 3) = 0$$

$$k = -\frac{25}{3} \vee k = 3$$

T.M

(50)



$\Delta BCH$  siku-siku di  $C$ .

Jarak  $C$  ke  $BH = CO$

$$\frac{12 \cdot 12\sqrt{2}}{2} = \frac{12\sqrt{3} \cdot CO}{2}$$

$$CO = \frac{12\sqrt{2}}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = 4\sqrt{6}$$

(51)

$${}^a \log \frac{b^2}{c} = x$$

$${}^a \log b^2 - {}^a \log c = x$$

$${}^a \log c = 2 {}^a \log b - x$$

$${}^a \log bc^2 = y$$

$${}^a \log b + {}^a \log c^2 = y$$

$$y - {}^a \log b = 2 {}^a \log c$$

$$y - {}^a \log b = 2(2 {}^a \log b - x)$$

$$y - {}^a \log b = 4 {}^a \log b - 2x$$

$$-5 {}^a \log b = -2x - y$$