

$$\begin{array}{l}
 \text{d. } 9x - 3y - 10 = 0 \quad | \cdot 5 \\
 2x - 5y + 2 = 0 \quad | \cdot 3 \\
 \hline
 6x - 15y + 6 = 0 \\
 14x - 56 = 0 \\
 14x = 56 \\
 \frac{x = 56}{14} = 4, \\
 \end{array}$$

$$\begin{array}{l}
 \Rightarrow 2x - 5y + 2 = 0 \\
 2(4) - 5y + 2 = 0 \\
 8 - 5y + 2 = 0 \\
 -5y = 0 - 8 - 2 \\
 -5y = -10 \\
 y = \frac{-10}{-5} = 2
 \end{array}$$

2. Dik: Ani : 4 buku + 3 pensil = Rp. 6.300
 Adi : 2 pensil + 5 buku = Rp. 7.000

$$\Rightarrow \text{buku} = a$$

$$\text{pensil} = b$$

$$\begin{array}{l}
 \Rightarrow 4a + 3b = 6.300 \quad | \times 2 \\
 5a + 2b = 7.000 \quad | \times 3 \\
 \hline
 8a + 6b = 12.600 \\
 15a + 6b = 21.000 \\
 \hline
 -7a = -8.400 \\
 a = \frac{-8.400}{7} = 1.200
 \end{array}$$

Subtitusi nilai a

$$4a + 3b = 6.300$$

$$4(1.200) + 3b = 6.300$$

$$4.800 + 3b = 6.300$$

$$3b = 6.300 - 4.800$$

$$3b = 1.500$$

$$b = \frac{1.500}{3} = 500$$

$$\text{HP} = a : \text{harga buku} = 1.200$$

$$b : \text{harga pensil} = 500,,$$

3. Rumus keliling persegi panjang = $\boxed{2p + 2l}$

$$2p + 2l = 22 \text{ cm}$$

$$3(2p) + 2(2l) = 58 \text{ cm}$$

$$6p + 4l = 58 \text{ cm}$$

Dit: p dan l

Penyelesaian: Cara eliminasi \Rightarrow



Kalkulus Kel. 1

Kelompok : Hanif
Dafri
Riyadi
Ketua : Hanif
Dafri
Riyadi
Lampu :
Many

$$\begin{array}{l} \text{I. a. } \begin{array}{rcl} 5x + 2y & = & 8 \\ 2x + y & = & 1 \end{array} \quad \left| \begin{array}{c} 3 \\ - \\ 2 \end{array} \right. \quad \begin{array}{rcl} 15x + 6y & = & 24 \\ 4x + y & = & 2 \end{array} \\ \begin{array}{rcl} 11x & = & 22 \\ x & = & 2 \end{array} \end{array}$$

$$\Rightarrow 2(2) + 3y = 1 \quad \text{HP : } (2, -1)$$

$$4 + 3y = 1$$

$$3y = 1 - 4$$

$$3y = -3$$

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

$$\begin{array}{l} b. \quad \begin{array}{rcl} 3x - 2y & = & 8 \\ 6x + 5y & = & 7 \end{array} \quad \left| \begin{array}{c} 5 \\ 2 \end{array} \right. \quad \begin{array}{rcl} 15x - 10y & = & 40 \\ 12x + 10y & = & 14 \end{array} \\ \hline 27x = 54 \end{array}$$

$$\Rightarrow 3x - 2y = 8$$

$$3(2) - 2y = 8$$

$$6 - 2y = 8 \quad \text{HP : } (2, 1)$$

$$2y = 8 - 6$$

$$2y = 2$$

$$y = 1$$

$$\begin{array}{l} c. \quad \begin{array}{rcl} 3x - y & = & 16 \\ 4x - 3y & = & 23 \end{array} \quad \left| \begin{array}{c} 3 \\ - \\ 1 \end{array} \right. \quad \begin{array}{rcl} 9x - 3y & = & 48 \\ 4x - 3y & = & 23 \end{array} \\ \hline 5x = 25 \\ x = 5 \end{array}$$

$$\begin{array}{l} \Rightarrow 3x - y = 16 \quad (\text{HP : } 5, -1) \\ 3(5) - y = 16 \\ 15 - y = 16 \\ -y = 16 - 15 \\ -y = 1 \\ y = -1 \end{array}$$

$$\begin{array}{r} \Rightarrow 6P + 4L = 58 \\ 2P + 2L = 22 \end{array} \left| \begin{array}{l} \times 1 \\ \times 2 \end{array} \right| \begin{array}{r} 6P + 4L = 58 \\ 4P + 4L = 44 \end{array} -$$

$$2P = 14$$

$$P = \frac{14}{2} = 7,$$

$$\begin{aligned} &\rightarrow 2P + 2L = 22 \\ &2(7) + 2L = 22 \\ &14 + 2L = 22 \\ &2L = 22 - 14 \\ &2L = 8 \\ &L = \frac{8}{2} = 4 \end{aligned}$$

$H_p = \rightarrow$ Panjang = 7 cm
 \rightarrow Luas = 9 cm

$$\begin{aligned} 4. 10a + b = 7(a+b) &\rightarrow \text{Persamaan (1)} \\ 10b + a = (a+b) + 18 &\rightarrow \text{Persamaan (2)} \end{aligned}$$

$$\rightarrow 10a + b = 7a + 7b$$

$$3a = 6b$$

$$a = \frac{6b}{3} = 2b \text{ persamaan (3)}$$

$$\rightarrow 10b + a = (a+b) + 18$$

$$10b + a = a + b + 18$$

$$9b = 18$$

$$b = \frac{18}{9} = 2$$

$$\rightarrow a = 2b$$

$$a = 2(2)$$

$$a = 4$$

$$H_p = (a : 4 \quad b : 2)$$