* penerapan sistem persamaan linear dua dan tiga variabel

1. Diket = H1 = 10 Tiket. 1 Bundel tiket = x lembar

H2 = $\frac{1}{2}$ (x − 10).

H3 = 5 Tiket.

Sisa = 2 Tiket

Tentukan 1 bundel Tiket ?

$x = 10 + \frac{1}{2}(x+10) + 5 + 2$

$x = 10 + \frac{1}{2}x - 5 + 5 + 2$

$x - \frac{1}{2}x = 10 + 2.$

1 bundel tiket sebanyak = 24

$x - \frac{1}{2}x = 12$

$\frac{1}{2}x = 12 = 24$

2. Umur Ayah sekarang = x

Umur ajeng sekarang = y.

Diket = $x - 7 = 6(y-2)$

$x - 7 = 6y - 12.$

$x - 6y = -35$

$2(x+4) = 5(y+4) + 9.$

$2x + 8 = 5y + 20 + 9.$

$2x - 5y = 21$

maka =

$x - 6y = -35$ | x 5

$2x - 5y = 21$ | x 6

$-5x + 30y = 175$

$-2x + 30y = -126.$ −

$7x = 301$

$x = 43.$

maka Umur ayah sekarang = 43

3. Diket = kakak = x

Adik = y.

$\frac{y-10}{x+10} = \frac{2}{3}$

$3y - 30 = 2x - 20.$

$3y - 2x = 10.$

$\frac{y}{x} = \frac{4}{5}$

$5y = 4x$

$\frac{5y}{4} = x.$

$3y - 2x = 10$

$3y - 2 \cdot \frac{5y}{4} = 10.$

$3y - \frac{5y}{2} = 10.$

$6y - 5y = 20.$

$y = 20.$

$x = \frac{5y}{4}$

$x = \frac{5 \cdot 20}{4}$

$x = 25$

• Sepuluh tahun yg akan datang.

Adik : kakak = 20+10 : 25+10

30 : 35 = 6 : 7

4. Dikat = A = 80x + 20y = 2960 x = daging
B = 70x + 40y = 3040. y = Ikan

Tentukan harga Ikan pada toko A dan B.

$80x + 20y = 2960 \;/\times 2 \quad 160x + 40y = 5920$
$70x + 40y = 3040 \;/\times 1 \quad 70x + 40y = 3040 \;-$
$90x = 2880.$
$x = 32$

~~A~~. $80x + 20y = 2960$
$80.32 + 20y = 2960.$
$2560 + 20y = 2960$
$20y = 2960 - 2560$
$20y = 400$
$y = 20.$

Jadi harga Ikan pada kedua toko = 20.000

5. Dikat Agus = 4L + 2B = 74000 L = lembar
bardi = 2L + 3B = 55.000 B = boriblaser

Ditanyakan 5L = .. ?

$4L + 2B = 74.000 \;/\times 3 \quad 12L + 6B = 222.000$
$2L + 3B = 55.000 \;/\times 2 \quad 4L + 6B = 110.000 \;-$
$8L = 112000$
$L = 14.000.$

$5L = 5.14.000.$
$= 70.000$ //.