

Příklad 18:

$$6x - 8 = 2x - 12 \quad | -2x; +8$$

$$6x - 2x = -12 + 8$$

$$4x = -4 \quad | :4$$

$$\underline{x = -1}$$

ZK:

$$L = 6(-1) - 8 = -6 - 8 = -14$$

$$P = 2(-1) - 12 = -2 - 12 = -14$$

$$\underline{L = P}$$

$$5(2x - 1) + 2 = 7(x + 3)$$

$$10x - 5 + 2 = 7x + 21$$

$$10x - 3 = 7x + 21 \quad | +3; -7x$$

$$10x - 7x = 21 + 3$$

$$3x = 24 \quad | :3$$

$$\underline{x = 8}$$

ZK:

$$L = 5(2 \cdot 8 - 1) + 2 = 5 \cdot 15 + 2 = 75 + 2 = 77$$

$$P = 7(8 + 3) = 7 \cdot 11 = 77$$

$$\underline{L = P}$$

$$3(x - 5) - 7(2x - 9) = 4(x + 12)$$

$$3x - 15 - 14x + 63 = 4x + 48$$

$$-11x + 48 = 4x + 48 \quad | -4x; -48$$

$$-11x - 4x = 48 - 48$$

$$-15x = 0 \quad | :(-15)$$

$$\underline{x = 0}$$

ZK:

$$L = 3(0 - 5) - 7(2 \cdot 0 - 9) = -15 - 7 \cdot (-9) = -15 + 63 = 48$$

$$P = 4(0 + 12) = 4 \cdot 12 = 48$$

$$\underline{L = P}$$

$$6y - 7(11 - y) + 11 = 4y - 3(20 - y)$$

$$6y - 77 + 7y + 11 = 4y - 60 + 3y$$

$$13y - 66 = 7y - 60 \quad | +66; -7y$$

$$13y - 7y = -60 + 66$$

$$6y = 6 \quad | :6$$

$$\underline{y = 1}$$

ZK:

$$L = 6 \cdot 1 - 7(11 - 1) + 11 = 6 - 70 + 11 = -53$$

$$P = 4 \cdot 1 - 3(20 - 1) = 4 - 3 \cdot 19 = 4 - 57 = -53$$

$$\underline{L = P}$$

$$8(3x - 2) - 13x = 5(12 - 3x) + 7x$$

$$24x - 16 - 13x = 60 - 15x + 7x$$

$$11x - 16 = 60 - 8x \quad | +16; +8x$$

$$11x + 8x = 60 + 16$$

$$19x = 76 \quad | :19$$

$$\underline{x = 4}$$

ZK:

$$L = 8(3 \cdot 4 - 2) - 13 \cdot 4 = 8 \cdot 10 - 52 = 80 - 52 = 28$$

$$P = 5(12 - 3 \cdot 4) + 7 \cdot 4 = 5 \cdot 0 + 28 = 28$$

$$\underline{L = P}$$

Tři dělnice vysázeli za den 3555 sazenic. První pracovala v normě, druhá vysázela o 120 sazenic víc a třetí o 135 sazenic víc, než byla norma. Kolik sazenic byla norma?

První x	 1100	$x + x + 120 + x + 135 = 3555$
Druhá x + 120	 1220	$3x + 255 = 3555 \quad -255$
Třetí x + 135	 1235	$3x = 3300 \quad :3$
Celkem 3555		$\underline{x = 1100}$

Norma byla 1100 sazenic.