

Formula:

$$4(x-5) - 3(x-3) = 21$$

$$4x - 20 - 3x + 9 = 21$$

$$x - 11 = 21 \quad | +11$$

$$\underline{x = 32}$$

$$L = 4 \cdot (32 - 5) - 3 \cdot (32 - 3) =$$

$$= 4 \cdot 27 - 3 \cdot 29 = 108 - 87 =$$

$$= \underline{21}$$

$$\underline{P = 21}$$

$$\underline{L = P}$$

$$-(3x - 8) = 35$$

$$-3x + 8 = 35 \quad | -8$$

$$-3x = 27 \quad | : (-3)$$

$$\underline{x = -9}$$

$$L = -(3 \cdot (-9) - 8) = -(-27 - 8) =$$

$$= -(-35) = \underline{35}$$

$$\underline{P = 35}$$

$$\underline{L = P}$$

$$3(5 + 3x) = 6x + 2(4x - 10)$$

$$15 + 9x = 6x + 8x - 20$$

$$15 + 9x = 14x - 20 \quad | -9x + 20$$

$$35 = 5x \quad | :5$$

$$\underline{7 = x}$$

$$L = 3 \cdot (5 + 3 \cdot 7) = 3 \cdot (5 + 21) =$$

$$= 3 \cdot 26 = \underline{78}$$

$$P = 6 \cdot 7 + 2(4 \cdot 7 - 10) =$$

$$= 42 + 2(28 - 10) = 42 + 2 \cdot 18 =$$

$$= 42 + 36 = \underline{78} \quad \underline{L = P}$$

$$6 \cdot (2x - 4) - 2(2x - 1) = 3(7 - 2x) - (x - 2)$$

$$12x - 24 - 4x + 2 = 21 - 6x - x + 2$$

$$8x - 22 = 23 - 7x$$

$$15x = 45$$

$$\underline{x = 3}$$

$$L = 6(2 \cdot 3 - 4) - 2(2 \cdot 3 - 1) =$$

$$= 6 \cdot (6 - 4) - 2(5) =$$

$$12 - 10 = \underline{2}$$

$$P = 3(7 - 2 \cdot 3) - (3 - 2) =$$

$$= 3 \cdot (1) - 1 = \underline{2}$$

27. DU z MF - řešení

1)  $S_1 = 6 \text{ cm}^2$   
 $F_1 = 240 \text{ N}$

$S_2 = 10 \text{ cm}^2$   
 $F_2 = ? \text{ N}$

$$\frac{F_1}{S_1} = \frac{F_2}{S_2}$$

$$\frac{240}{6} = \frac{F_2}{10}$$

$$400 \text{ N} = F_2$$

Koda púrat' silou 400N.

2)  $S_1 = 30 \text{ cm}^2$   
 $F_1 = 100 \text{ N}$

$S_2 = 300 \text{ cm}^2$   
 $F_2 = ? \text{ N}$

$$\frac{F_1}{S_1} = \frac{F_2}{S_2}$$

$$\frac{100}{30} = \frac{F_2}{300}$$

$$\frac{10 \cdot 300}{3} = F_2$$

$$1000 \text{ N} = F_2$$

Kapalina púrat' silou 1000N.

3)  $S_1$   
 $F_1 = 32 \text{ N}$

$S_2 = ?$   
 $F_2 = ?$

něste určit  
 málo informací

4) celkem ... 135 Kč  
 poměr ... 4:5

$135 : 9 = 15$   
 45

1 díl ... 15 Kč

4 díly ... 60 Kč

5 díly ... 75 Kč

Zvolili si peníze 60:75 Kč

R Dojížděj: pěšky  
 2 : 7

$2 : 7 = 96 : x$

$\frac{2}{7} = \frac{96}{x}$

$2x = 96 \cdot 7$

$x = \frac{96 \cdot 7}{2} = 48 \cdot 7 = 336$

Pěšky chodí 336 dětí.