

Grupe reseni rovnice

a) $9(x-4) - 5x = x - 12$

$$9x - 36 - 5x = x - 12$$

$$9x - 5x - x = -12 + 36$$

$$3x = 24$$

$$\underline{x = 8}$$

zk.
 $L = 9 \cdot (8-4) - 5 \cdot 8 = -4$

$$P = 8 - 12 = -4$$

$$\underline{L = P}$$

b) $3x - 7(x-5) = 2x - 13$

$$3x - 7x + 35 = 2x - 13$$

$$3x - 7x - 2x = -13 - 35$$

$$-6x = -48$$

$$\underline{x = +8}$$

zk.

$$L = 3 \cdot 8 - 7 \cdot (8-5) = 3$$

$$P = 2 \cdot 8 - 13 = 3$$

$$\underline{L = P}$$

c) $5(x-2) + 3 = 4(x+6) - 25$

$$5x - 10 + 3 = 4x + 24 - 25$$

$$5x - 4x = 24 - 25 + 10 - 3$$

$$\underline{x = 6}$$

zk.

$$L = 5 \cdot (6-2) + 3 = 23$$

$$P = 4 \cdot (6+6) - 25 = 23$$

$$\underline{L = P}$$

d) $6(5-3x) - (12x+15) = 0$

$$30 - 18x - 12x - 15 = 0$$

$$-18x - 12x = 15 - 30$$

$$-30x = -15$$

$$\underline{x = \frac{1}{2} = 0,5}$$

zk.

$$L = 6 \cdot (5-3 \cdot 0,5) - (12 \cdot 0,5 + 15) =$$

$$6 \cdot 2,5 - (6 + 15) =$$

$$15 - 21 = -6$$

$$P = 0$$

$$\underline{L = P}$$

e) $\frac{2}{3} \cdot (6-y) + 2 - y = 1$ |.3

$$2(6-y) + 6 - 3y = 3$$

$$12 - 2y + 6 - 3y = 3$$

$$-2y - 3y = 3 - 12 - 6$$

$$-5y = -15$$

$$\underline{y = 3}$$

zk. $L = \frac{2}{3} \cdot (6-3) + 2 - 3 =$

$$2 + 2 - 3 = 1$$

$$P = 1$$

$$\underline{L = P}$$

f) $\frac{2}{3} \cdot (3 - \frac{a}{2}) = \frac{1}{3} \cdot (6-a)$ |.3

$$2 \cdot (3 - \frac{a}{2}) = 1 \cdot (6-a)$$

$$6 - a = 6 - a$$

$$-a + a = 6 - 6$$

$$0 = 0$$

nekonecne mnoho reseni

g) $\frac{5+x}{3} = 4$ |.3

$$5+x = 12$$

$$x = 12-5$$

$$\underline{x = 7}$$

zk. $L = \frac{5+7}{3} = 4$

$$P = 4$$

$$\underline{L = P}$$

h) $\frac{a-5}{4} = \frac{a-3}{2}$ |.4

$$a-5 = 2(a-3)$$

$$a-5 = 2a-6$$

$$a-2a = -6+5$$

$$-a = -1$$

$$\underline{a = 1}$$

zk.

$$L = \frac{1-5}{4} = \frac{-4}{4} = -1$$

$$P = \frac{1-3}{2} = \frac{-2}{2} = -1$$

$$\underline{L = P}$$