

ROVNICE

10 Řešte rovnici a proveďte zkoušku.

max. 2 body

$$\frac{x}{2} + \frac{x}{3} = x - 1 \quad | \cdot 6$$

$$3x + 2x = 6x - 6$$

$$\underline{\underline{6 = x}}$$

zk.:

$$L = \frac{6}{2} + \frac{6}{3} = 3 + 2 = 5$$

$$P = 6 - 1 = 5$$

11 Řešte rovnici a proveďte zkoušku.

max. 2 body

$$\frac{x+1}{3} - \frac{x-2}{2} = 6 + x \quad | \cdot 6$$

$$2(x+1) - 3(x-2) = 36 + 6x$$

$$2x + 2 - 3x + 6 = 36 + 6x$$

$$-x + 8 = 36 + 6x$$

$$-x - 6x = 36 - 8$$

$$-7x = 28$$

$$\underline{\underline{x = -4}}$$

zk.:

$$L = \frac{-4+1}{3} - \frac{-4-2}{2} = \frac{-3}{3} - \frac{-6}{2} = -1 + 3 = \underline{\underline{2}}$$

$$P = 6 - 4 = \underline{\underline{2}}$$

12 Řešte rovnici a proveďte zkoušku.

max. 2 body

$$\frac{1}{2}(x+3) + \frac{1}{4}(3x+2) = \frac{x}{4} \quad | \cdot 4$$

$$2(x+3) + 1(3x+2) = x$$

$$2x + 6 + 3x + 2 = x$$

$$5x - x = -8$$

$$4x = -8$$

$$\underline{\underline{x = -2}}$$

$$L = \frac{1}{2}(-2+3) + \frac{1}{4}(3(-2)+2)$$

$$= \frac{1}{2} \cdot 1 + \frac{1}{4}(-4) =$$

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

$$P = -\frac{2}{4} = -\frac{1}{2}$$

13 Řešte rovnici a proveďte zkoušku.

max. 2 body

$$(x+1)^2 - (x-1)^2 = x - 3$$

$$x^2 + 2x + 1 - (x^2 - 2x + 1) = x - 3$$

$$x^2 + 2x + 1 - x^2 + 2x - 1 = x - 3$$

$$4x - x = -3$$

$$3x = -3$$

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

$$L = (-1+1)^2 - (-1-1)^2$$

$$= 0 - 4 = -4$$

$$P = -1 - 3 = -4$$