

5 Řešte rovnici:

5.1

$$-\frac{2}{3} \cdot \frac{x}{2} = \frac{5}{12}$$

$$-\frac{x}{3} = \frac{5}{12} \quad | \cdot 12$$

$$-4x = 5 \quad | : (-4)$$

$$x = -5 : 4$$

$$x = -\frac{5}{4} = -1,25$$

5.2

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

$$3(x-2) - 6x = 12 - 4x$$

$$3x - 6 - 6x = 12 - 4x$$

$$-3x - 6 = 12 - 4x$$

$$-3x + 4x = 12 + 6 \quad \text{max. 4 body}$$

$$x = 18$$

5 Řešte rovnici:

5.1

$$2 \cdot \frac{5x}{6} - \frac{1}{3} = x - \frac{1}{2} \quad | \cdot 6$$

$$2 \cdot 5x - 2 = 6x - 3$$

$$10x - 2 = 6x - 3$$

$$10x - 6x = -3 + 2$$

$$4x = -1$$

$$x = -\frac{1}{4} = -0,25$$

5.2

$$\frac{y}{7} - \frac{1-3y}{2} = \frac{7}{4} + \frac{5y}{3} \quad | \cdot 12$$

$$12y - 6(1-3y) = 21 + 20y$$

$$12y - 6 + 18y = 21 + 20y$$

$$30y - 6 = 21 + 20y$$

5

Řešte rovnici:

5.1

$$x \cdot (x+2) + 0,6 = x \cdot x + \frac{1}{5} \quad | \cdot 10$$

$$5x(x+2) + 3 = 5x \cdot x + 1$$

$$5x^2 + 10x + 3 = 5x^2 + 1$$

$$5x^2 + 10x - 5x^2 = 1 - 3$$

$$10x = -2$$

$$x = -\frac{2}{10} = -0,2$$

5.2

$$\frac{2y-3}{4} - 2 \cdot \frac{y}{5} = \frac{2-y}{2} - 1 \quad | \cdot 20$$

$$5 \cdot (2y-3) - 8y = 10(2-y) - 20 - 3$$

$$10y - 15 - 8y = 20 - 10y - 20$$

$$2y - 15 = -10y + 0$$

$$2y + 10y = 15$$

$$12y = 15$$

$$y = \frac{15}{12} = \frac{5}{4}$$

max. 4 body