

Vaja dela mojstra



1. Reši enačbe in zapiši množico rešitev.

a) $x(x - 3) = 0$

$$x_1 = 0 \quad x - 3 = 0$$

$$x_2 = 3$$

$$R = \{0, 3\}$$

b) $x(x + 2) = 0$

$$x_1 = 0 \quad x + 2 = 0$$

$$x_2 = -2$$

$$R = \{-2, 0\}$$

c) $2x(x - 1) = 0$

$$2x = 0 \quad x - 1 = 0$$

$$x_1 = 0 \quad x_2 = 1$$

$$R = \{0, 1\}$$

č) $(x + 7)^2 = 0$

$$(x + 7)(x + 7) = 0$$

$$x + 7 = 0$$

$$x_1 = -7$$

$$R = \{-7\}$$

d) $(2x - 3)(x + 3) = 0$

$$2x - 3 = 0 \quad x + 3 = 0$$

$$2x = 3 \quad x_2 = -3$$

$$x = \frac{3}{2}$$

$$x_1 = 1\frac{1}{2} \quad R = \{-3, 1\frac{1}{2}\}$$

e) $(x - 3)(5x + 1) = 0$

$$x - 3 = 0 \quad 5x + 1 = 0$$

$$x = 3 \quad 5x = -1 \quad / :5$$

$$x = -\frac{1}{5}$$

$$R = \{-\frac{1}{5}, 3\}$$

f) $x(x - 1)(x + 4) = 0$

$$x_1 = 0 \quad x - 1 = 0 \quad x + 4 = 0$$

$$x_2 = 1 \quad x_3 = -4$$

$$R = \{-4, 0, 1\}$$

g) $x^2 + 4x + 4 = 0$

$$(x + 2)^2 = 0$$

$$(x + 2)(x + 2) = 0$$

$$x + 2 = 0$$

$$x = -2$$

$$R = \{-2\}$$