10. Kvadratické rovnice v množině R

Řešte dané rovnice v R:

1. $64 + x^2 = 16x$ $\qquad$ $P = \{\, 8 \,\}$

2. $(2x - 1) \cdot (x + 5) = 9x + 13$ $\qquad$ $P = \{+3, -3\}$

3. $(x + 2) \cdot (x - 3) = (3x - 2) \cdot (x + 3)$ $\qquad$ $P = \{0, -4\}$

4. $\dfrac{5x^2 - 19}{9} = x^2 + 5$ $\qquad$ $P = \theta$

5. $\dfrac{x}{x + 3} + \dfrac{3}{x - 3} = \dfrac{17}{8}$ $\qquad$ $P = \{+5, -5\}$

6. $\dfrac{1}{x - 4} - \dfrac{1}{x + 2} = \dfrac{3}{8}$ $\qquad$ $P = \{6, -4\}$

7. $\dfrac{x}{2} + \dfrac{x}{3} + \dfrac{x}{4} = \dfrac{x^2}{9} - 3$ $\qquad$ $P = \{12, -\dfrac{9}{4}\}$

8. $\dfrac{2x - 8}{x - 1} = \dfrac{8x + 3}{7x - 3}$ $\qquad$ $P = \{9, \dfrac{1}{2}\}$

9. $\dfrac{x - 1}{x} + \dfrac{x}{x - 1} + \dfrac{1}{x - x^2} = 0$ $\qquad$ $P = \theta$

10. $\left(\dfrac{x - 1}{x + 1}\right)^2 - 3 \cdot \dfrac{x - 1}{x + 1} - 4 = 0$ $\qquad$ $P = \{-\dfrac{5}{3}, 0\}$