

Doplňte tabulku, všechny úlohy řešte v R

a) $9 - 4x^2 = 0$	$9 - 4x^2 = 0$ $9 = 4x^2 \Rightarrow x^2 = \frac{9}{4} \Rightarrow x = \frac{3}{2}$	$P = \left\{ -\frac{3}{2}, \frac{3}{2} \right\}$
b) $3x^2 + 6x = 0$	$3x^2 + 6x = 0$ $3x \cdot (x + 2) = 0 \Rightarrow x_1 = 0, x_2 = -2$	$P = \{0, -2\}$
c) $x^2 + 9 = 0$	$x^2 + 9 = 0$ $x^2 = -9$	$P = \emptyset$
d) $3x^2 - 11x - 4 = 0$	$3x^2 - 11x - 4 = 0$ $D = b^2 - 4ac = 121 + 48 = 169$ $x_{1,2} = \frac{-b \pm \sqrt{D}}{2a} = \frac{11 \pm 13}{6}$ $x_1 = 4, \quad x_2 = -\frac{1}{3}$	$P = \left\{ 4, -\frac{1}{3} \right\}$
e) $\frac{4x}{x+4} - \frac{4}{x} = 1$	$\frac{4x}{x+4} - \frac{4}{x} = 1 \quad x \neq -4, x \neq 0$ $4x^2 - 4x - 16 = x^2 + 4x$ $3x^2 - 8x - 16 = 0$ $D = 64 + 192 = 256$ $x_{1,2} = \frac{8 \pm \sqrt{256}}{6} = \frac{8 \pm 16}{6}$ $x_1 = 4, \quad x_2 = -\frac{4}{3}$	$P = \left\{ 4, -\frac{4}{3} \right\}$

[Zpět:](#)