

## LINEÁRNÍ ROVNICE

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**Zadání:**

**Řešte lineární rovnice, provedte zkoušku a určete podmínky:**

1. $\frac{8+3y}{4y-6} + \frac{6y-2}{10y-15} = \frac{7}{6} - \frac{5}{2y-3}$	<b>Řešení</b> $y = -33, L=P=\frac{27}{46},$ $y \neq 1,5$
2. $2 - \frac{x+5}{x-7} = \frac{x+3}{x-5}$	$x = 5,8, L=P=2$ $x \neq 7, x \neq 5$
3. $\frac{7}{a+3} - \frac{10}{a^2-9} = -\frac{3}{a-3}$	$a = 2,2; L=P= -\frac{125}{52}$ $x \neq 3, x \neq -3$
4. $\frac{3x+7}{x-5} - \frac{5+x}{x}.3 - \frac{25-3x}{x^2-5x} = 0$	$x = -5, L=P=0,$ $x \neq 0, x \neq 5$
5. $\frac{6-z}{1+z} - \frac{2(4z-3)}{z^2-1} = \frac{z}{1-z}$	$z \in \mathbb{R} - \{-1, 1\}$
6. $\frac{4}{6-p} - \frac{(5p-2)p}{36-p^2} = \frac{5p}{6+p}$	$p = 1, L=P=\frac{5}{7}$ $p \neq 6, p \neq -6$
7. $\frac{2}{x+4} = \frac{3x^2}{x^3+64} - \frac{x-4}{x^2-4x+16}$	$x = 2, L=P=\frac{1}{3}$ $x \neq -4$
8. $\frac{2x-1}{5-x} + 4 = \frac{3+2x}{x-2}$	$x = \frac{53}{16}, L=P=\frac{22}{3},$ $x \neq 5, x \neq 2$
9. $\frac{6y-1}{5-4y} = \frac{4-3y}{2y-5}$	$y = -15, L=P= -\frac{7}{5}$ $y \neq \frac{5}{2}, y \neq \frac{5}{4}$
10. $\frac{5}{y+1} - 7 = \frac{10-7y}{y-1}$	$y = 4, L=P= -6$ $y \neq 1, y \neq -1$