

Rovnice s množkami

pozn: $(A+B)^2 = A^2 + 2 \cdot AB + B^2$

$$(A-B)^2 = A^2 - 2AB + B^2$$

$$(A+B) \cdot (A-B) = A^2 - B^2$$

pr: $(x-4)^2 = (x+8)^2$

$$x^2 - 8x + 16 = x^2 + 16x + 64 \quad | -x^2$$

$$-8x + 16 = 16x + 64 \quad | -16$$

$$-8x = 16x + 48 \quad | -16x$$

$$-24x = 48 \quad | :(-24)$$

$$\underline{\underline{x = -2}}$$

Zh: $L = (-2-4)^2 = (-6)^2 = 36$ $L = P$
 $P = (-2+8)^2 = 6^2 = 36$

pr: $(z+2) \cdot (z-2) + 5z = z \cdot (z+3)$

$$z^2 - 4 + 5z = z^2 + 3z \quad | -z^2$$

$$-4 + 5z = 3z \quad | +4$$

$$5z = 3z + 4 \quad | -3z$$

$$2z = 4 \quad | :2$$

$$\underline{\underline{z = 2}}$$

Zh: $L = (2+2) \cdot (2-2) + 5 \cdot 2 = 4 \cdot 0 + 10 = 10$

$$P = 2 \cdot (2+3) = 2 \cdot 5 = 10 \quad L = P$$