

$$(x-2)^2 = (x-9)^2$$

$$x^2 - 4x + 4 = x^2 - 18x + 81$$

$$\underline{x^2 - x^2 - 4x + 18x + 4 - 81 = 0}$$

$$14x - 77 = 0$$

$$14x = 77$$

$$x = 77 : 14$$

$$x = 5,5 \quad \text{или} \quad x = \frac{77}{14}$$

$$x = 5 \frac{7}{14}$$

$$x = 5 \frac{1}{2}$$