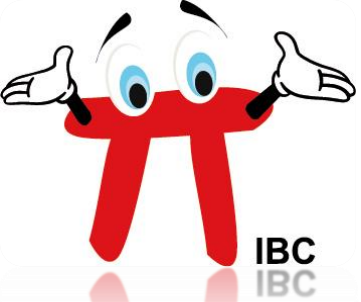


WURZELGLEICHUNG

Celik Hanife





Wurzelgleichung



$$2\sqrt{x+3} - 3\sqrt{x-2} = 0 \quad | + 3\sqrt{x-2}$$

$$2\sqrt{x+3} = 3\sqrt{x-2} \quad |^2$$

$$4(x+3) = 9(x-2)$$

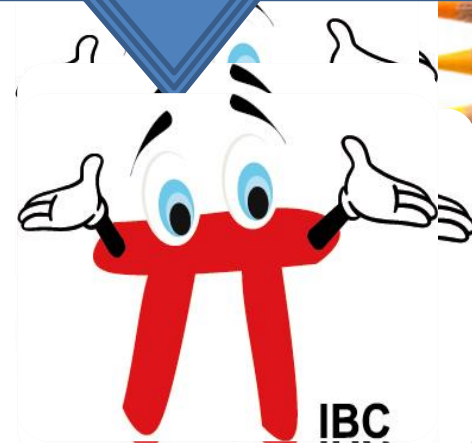
$$4x + 12 = 9x - 18 \quad | -12$$

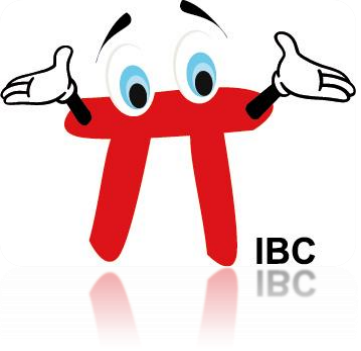
$$4x = 9x - 30 \quad | -9x$$

$$-5x = -30 \quad | : (-5)$$

$$x = 6$$

Durch die Zahl, die vor x steht, muss man auf beiden Seiten dividieren





Definitionsmenge

$$\sqrt{x+3} - 3\sqrt{x-2} = 0$$

$$x + 3 \geq 0 \quad | - 3$$

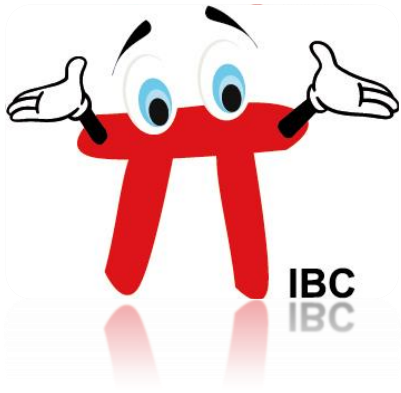
$$x \geq -3$$

$$x - 2 \geq 0 \quad | + 2$$

$$x \geq +2$$

$$Df = \{ x/x \geq 2 \}$$





Probe

$$2\sqrt{6+3} - 3\sqrt{6-2} = 0$$

$$2\sqrt{9} - 3\sqrt{4} = 0$$

$$\underbrace{2 \cdot 3} - \underbrace{3 \cdot 2} = 0$$

$$6 - 6 = 0$$

$$0 = 0$$

