

Potenzen von negativen Zahlen

*Lösungsblatt***Aufgabe:**

Berechne die Potenzen von folgenden negativen Zahlen!

$$(-5)^3 = -125$$

$$(-3)^4 = +81$$

$$(-4)^2 = +16$$

$$(-2)^5 = -32$$

$$(-6)^3 = -216$$

$$(-7)^4 = +2401$$

$$(-4)^3 \cdot (-4) = +256$$

$$(-2)^4 \cdot (-2)^3 = -128$$

$$(-3)^2 \cdot (-3)^2 = +81$$

$$\left(-\frac{1}{4}\right)^2 = +\frac{1}{16}$$

$$\left(-\frac{2}{3}\right)^3 \cdot \left(-\frac{2}{3}\right)^2 = -\frac{32}{243}$$

$$\left(-\frac{3}{5}\right)^3 = -\frac{27}{125}$$

$$\left(-\frac{3}{4}\right) \cdot \left(-\frac{3}{4}\right)^3 = +\frac{81}{256}$$

$$\left(-\frac{1}{7}\right)^4 = +\frac{1}{2401}$$

$$\left(-\frac{1}{2}\right)^4 \cdot \left(-\frac{1}{2}\right)^2 = +\frac{1}{64}$$

$$\begin{aligned} &(-4)^2 + (-3)^3 + (-5)^2 = \\ &= (+16) + (-27) + (+25) = \\ &= 16 - 27 + 25 = 14 \end{aligned}$$

$$\begin{aligned} &(+5)^3 - (-4)^4 + (-2)^5 = \\ &= (+125) - (+256) + (-32) = \\ &= 125 - 256 - 32 = -163 \end{aligned}$$

$$\begin{aligned} &(-1)^{12} + (-1)^7 + (-1)^{18} = \\ &= (+1) + (-1) + (+1) = \\ &= 1 - 1 + 1 = 1 \end{aligned}$$

$$(-1,6)^2 = +2,56$$

$$(-4,85)^2 = +23,5225$$

$$(-3,5)^3 = -42,875$$

$$(-7,6)^4 = +3336,2176$$

$$(-2,7)^5 = -143,48907$$

$$(-0,9)^7 = -0,4782969$$