

MNOŽENJE POTENC Z ENAKIMI OSNOVAMI

$$2^2 \cdot 2^3 = 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 = 2^{2+3} = 2^5$$

Pravilo: Potence z enakimi osnovami množimo tako, da osnovo prepíšemo, eksponente pa SEŠTEJEMO.

$$a^m \cdot a^n = a^{m+n}; \quad m, n \in \mathbb{N} \text{ (m in n sta naravni števili)}$$

Zgledi: Najprej poskusi rešiti sam/a, nato pa preveri rezultate.

$$2^4 \cdot 2^3 = 2^{4+3} = 2^7 = 128$$

$$4^3 \cdot 4^6 = 4^{3+6} = 4^9$$

$$(-3)^2 \cdot (-3) = (-3)^2 \cdot (-3)^1 = (-3)^{2+1} = (-3)^3 = -27$$

Če potenca »nima« eksponenta, je eksponent enak 1!!

$$0,7^2 \cdot 0,7^2 = 0,7^{2+2} = 0,7^4 = 0,2401$$

$$(-5) \cdot (-5)^4 \cdot (-5)^3 = (-5)^{1+4+3} = (-5)^8$$

$$9^7 \cdot 9^{11} \cdot 9^8 = 9^{7+11+8} = 9^{26}$$

$$\left(\frac{1}{2}\right)^3 \cdot \left(\frac{1}{2}\right)^4 \cdot \left(\frac{1}{2}\right)^7 = \left(\frac{1}{2}\right)^{3+4+7} = \left(\frac{1}{2}\right)^{14} = \frac{1^{14}}{2^{14}} = \frac{1}{2^{14}}$$

$$\left(-\frac{3}{4}\right)^8 \cdot \left(-\frac{3}{4}\right)^1 \cdot \left(-\frac{3}{4}\right)^6 \cdot \left(-\frac{3}{4}\right)^2 = \left(-\frac{3}{4}\right)^{8+1+6+2} = \left(-\frac{3}{4}\right)^{17}$$

Zdaj pa odpri učbenik na str. 75 in rešuj naloge 1, 2, 3, 4 😊