

# MNOŽENJE IN DELJENJE POTENC

1. Izpolni preglednico !

|           |       |         |                  |             |                       |
|-----------|-------|---------|------------------|-------------|-----------------------|
| potenca   | $a^3$ | $-2x^5$ | $\frac{2a^5}{3}$ | $(ab)^3$    | $(2xy^2)^3$           |
| osnova    | $a$   | $x$     | $a$              | $a \cdot b$ | $2 \cdot x \cdot y^2$ |
| eksponent | $3$   | $5$     | $5$              | $3$         | $3$                   |

2. Zmnoži !

$$a^3 \cdot a^5 = a^8 \quad (ab)^2 \cdot (ab)^5 \cdot (ab)^{10} = (a \cdot b)^{17} = a^{17} \cdot b^{17}$$

$$x^{12} \cdot x^3 \cdot x = x^{16} \quad \left(-\frac{2}{3}c\right)^2 \cdot \left(-\frac{2}{3}c\right)^4 = \left(-\frac{2}{3}c\right)^6 =$$

$$m^2 \cdot m^3 \cdot m = m^6 \quad \left(\frac{x}{y}\right) \cdot \left(\frac{x}{y}\right)^2 \cdot \left(\frac{x}{y}\right)^8 = \left(\frac{x}{y}\right)^{11} = \frac{x^{11}}{y^{11}}$$

$$7a^2 \cdot 3a^4 = 21 \cdot a^6 \quad \frac{7}{3}x \cdot 1 \frac{2}{7}x = \frac{7}{3} \cdot \frac{2}{1} \cdot x^2 = 3 \cdot x^2$$

$$\left(-1 \frac{1}{2}\right)m^5 \cdot \left(-3 \frac{1}{3}\right)m^2 = \frac{3}{2} \cdot \frac{10}{3} \cdot m^7 = 5 \cdot m^7$$

$$m^7 \cdot m^{-5} \cdot m^2 = m^4$$

$$u^2 \cdot u^{-3} \cdot u = u^0 = 1$$

3. Deli!

$$n^7 : n^5 = n^2 \quad m^{12} : m^{10} = m^2 \quad a^9 : a = a^8$$

$$\frac{x^4}{x^3} = x^1 = x \quad \frac{t^3 \cdot t^4}{t^2} = t^5 \quad \frac{n^5 \cdot n}{n^3} = n^3$$

$$\frac{m^{15}}{m^9} = m^6 \quad \frac{s \cdot s^6}{s^3} = s^4 \quad \frac{y^{10}}{y^5 \cdot y} = y^4$$

$$\frac{15a^{-5}}{3a^7} = 5 \cdot a^{-12} \quad \frac{25a^{-3}}{10a^{-4}} = \frac{5}{2} \cdot a^1 = 2 \frac{1}{2} \cdot a$$

$$\frac{0.2a^3}{0.1a^{-2}} = 2 \cdot a^5 \quad \frac{m^{-2} \cdot m^5}{m^{-3}} = \frac{m^3}{m^{-3}} = m^6$$

4. Poenostavi !

$$\frac{3x^3 \cdot x^2}{9x^5} = \frac{1}{3}x^0 = \frac{1}{3}$$

$$\frac{4y^2x}{16x^2y} = \frac{1}{4} \cdot x^{-1} \cdot y$$

$$0.5a^7b^3 : 0.25a^3 = 2 \cdot a^4b^3$$