LA POTENZA DI FRAZIONE

$$\left(\frac{2}{5}\right)^2 \neq \frac{2^2}{5}$$

$$\left(\frac{2}{5}\right)^2 = \frac{2}{5} \cdot \frac{2}{5} = \frac{4}{25}$$

$$\left(\frac{1}{3}\right)^3 = \frac{1}{3} \cdot \frac{1}{3} \cdot \frac{1}{3} = \frac{1}{27}$$

CASI PARTICOLARI

$$\left(\frac{2}{7}\right)^0 = 1$$

$$\left(\frac{5}{3}\right)^1 = \frac{5}{3}$$

PROPRIETÀ DELLE POTENZE CON LE FRAZIONI

STESSA BASE

$$\left(\frac{4}{3}\right)^2 \cdot \left(\frac{4}{3}\right)^3 = \left(\frac{4}{3}\right)^{2+3} = \left(\frac{4}{3}\right)^5$$

$$\left(\frac{1}{6}\right)^4 : \left(\frac{1}{6}\right)^3 = \left(\frac{1}{6}\right)^{4-3} = \left(\frac{1}{6}\right)^1$$

$$\left(\frac{9}{2}\right)^2 \cdot \left(\frac{1}{3}\right)^2 = \left(\frac{\cancel{9}^{3}}{2} \cdot \frac{1}{\cancel{3}_{1}}\right)^2 = \left(\frac{3}{2}\right)^2 = \frac{9}{4}$$

$$\left(\frac{5}{6}\right)^4 : \left(\frac{8}{3}\right)^4 = \left(\frac{5}{6} : \frac{8}{3}\right)^4 = \left(\frac{5}{\cancel{8}_{2}} \cdot \frac{\overset{1}{\cancel{3}}}{\cancel{8}}\right)^4 = \left(\frac{5}{16}\right)^4$$

$$\left[\left(\frac{1}{7}\right)^3\right]^2 = \left(\frac{1}{7}\right)^{3 \cdot 2} = \left(\frac{1}{7}\right)^6$$

Es. 557 p. 399

$$\left(\frac{3}{10}\right)^2 \cdot \left(\frac{3}{10}\right)^4 = \left(\frac{3}{10}\right)^6$$

$$\left(\frac{25}{21}\right)^4 \cdot \left(\frac{14}{5}\right)^4 = \left(\frac{\cancel{25}^{5}}{\cancel{21}_{3}} \cdot \frac{\cancel{14}^{2}}{\cancel{5}_{1}}\right)^4 = \left(\frac{10}{3}\right)^4$$

$$\left(\left(\frac{2}{9}\right)^3\right)^5 = \left(\frac{2}{9}\right)^{15}$$