PROPRIETÀ RADICI

PRODOTTO

$\sqrt{81 \cdot 25} =$

$= \sqrt{81} \cdot \sqrt{25} = 9 \cdot 5 = 45$

$\sqrt{36 \cdot 49} = \sqrt{36} \cdot \sqrt{49} =$

$= 6 \cdot 7 = 42$

~~$\sqrt{36 + 25 \cdot 9} =$~~

~~$= \sqrt{36} + \sqrt{25} \cdot \sqrt{9}$~~

QUOZIENTE

$\sqrt{169 : 64} = \sqrt{169} : \sqrt{64} = 13 : 8$

$\sqrt{\frac{169}{64}} = \frac{\sqrt{169}}{\sqrt{64}} = \frac{13}{8}$

$\sqrt{49 : 121} = \sqrt{49} : \sqrt{121} = 7 : 11$

$\sqrt{\frac{49}{121}} = \frac{\sqrt{49}}{\sqrt{121}} = \frac{7}{11}$

Rapporti e proporzioni

$$\mathcal{R}(4,6) = 4:6 = \frac{\cancel{4}^{\,2}}{\cancel{6}_{\,3}}$$

$$\mathcal{R}'(6,4) = 6:4 = \frac{\cancel{6}^{\,3}}{\cancel{4}_{\,2}}$$

$$\mathcal{R}\left(\frac{6}{5},\frac{7}{2}\right) = \frac{6}{5}:\frac{7}{2} = \frac{\frac{6}{5}}{\frac{7}{2}} = \frac{6}{5}\cdot\frac{2}{7} = \frac{12}{35}$$

$$\mathcal{R}'\left(\frac{7}{2},\frac{6}{5}\right) = \frac{7}{2}\cdot\frac{5}{6} = \frac{35}{12}$$

$6 : 4 = 18 : 12$

MEDI

ESTREMI

Uguaglianza di due rapporti

PROPORZIONE

$8 : 4 = 4 : 2$ CONTINUA

MEDIO PROPORZIONALE

Calcolo del termine incognito

ESTREMO

$$\frac{9}{4} : \frac{3}{8} = \frac{9}{2} : x \longrightarrow x = \frac{\frac{3}{8}\cdot\frac{9}{2}}{\frac{9}{4}} = \frac{3}{8}\cdot\frac{9}{2}\cdot\frac{4}{9} = \frac{3}{4}$$

MEDIO

$$a : x = c : d \longrightarrow x = \frac{a \cdot d}{c}$$

MEDIO PROPORZIONALE

$$\frac{6}{49} : x = x : \frac{2}{3}$$

$$x = \sqrt{\frac{6}{49}\cdot\frac{2}{3}} = \sqrt{\frac{4}{49}} = \frac{\sqrt{4}}{\sqrt{49}} = \frac{2}{7}$$