

$$\left(\frac{1}{2}\right)^{1/2} \cdot \left(\frac{1}{2}\right)^{2/3} = \left(\frac{1}{2}\right)^{1/2}$$

$$\frac{3^2 \sqrt[3]{3^4}}{3^5} = 3^2 \cdot 3^4 = \frac{3^6}{3^5} = 3^1$$