

$$\left(\frac{1}{2}\right)^{1/2} \left(\frac{1}{2}\right)^{2/3} = \frac{1}{2} + \frac{2}{3} = \frac{1}{2}^{1/6}$$

$$\frac{3^2 \sqrt{3}}{3^5} = \frac{1}{2} + 2 = \frac{5}{2} - 5 = 3 - \frac{5}{2}$$

$$\frac{\frac{2}{5}}{\frac{2}{5} - 3/4} = \left(\frac{2}{5}\right)^{1 - \frac{3}{4}} = \frac{1}{4} = \left(\frac{2}{5}\right)^{\frac{1}{4}}$$