

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

$$\frac{1}{2} \cdot \frac{2}{3} = \frac{2}{6}$$

$$\frac{1}{2} \sqrt{\frac{3}{6}}$$

$$3^{2/2} \cdot 3^{1/3} = 3^2 \cdot \sqrt[3]{3}$$

$$3^{5+2} = 3^7 = 3^{5/2} \cdot 3^{5/2}$$

$$3^{5/2} \cdot 3^{5/2} = 3^{5/2 + 5/2} = 3^5$$