

Rationalize each denominator.

$$1. \frac{24m^5n}{\sqrt[8]{2m^3n^5}} \cdot \frac{\sqrt[8]{2^7m^5n^3}}{\sqrt[8]{2^7m^5n^3}}$$

$$= 12m^4 \cdot \sqrt[8]{2^7m^5n^3}$$

$$2. \frac{4 + \sqrt{3}}{5 + \sqrt{3}} \cdot \frac{5 - \sqrt{3}}{5 - \sqrt{3}}$$

$$= \frac{17 + \sqrt{3}}{22}$$

3. Simplify. Use absolute value symbols when necessary.

$$\sqrt[6]{24c^{39}d^{15}} = c^6d^2 \cdot \sqrt[6]{24c^3d^3}$$