$$\frac{15}{\sqrt{5\sqrt{3}}} = \frac{3*5}{\sqrt{5\sqrt{3}}}$$

$$= \frac{3*\sqrt{5^2}}{\sqrt{5\sqrt{3}}} = \sqrt{\frac{5^2}{5}} * \frac{3}{\sqrt{\sqrt{3}}}$$

$$= \frac{\sqrt{5}*3}{\sqrt{\sqrt{3}}}$$

$$= \frac{3}{\sqrt[4]{3}}$$

$$= \frac{\sqrt[4]{3^4}}{\sqrt[4]{3}} = \sqrt[4]{\frac{3^4}{3}} = \sqrt[4]{3^3}$$

$$\frac{15}{\sqrt{5\sqrt{3}}} = \sqrt[4]{27}$$