

Multiply

$$(3\sqrt{2} - 4\sqrt{3})(2\sqrt{2} + 5\sqrt{3})$$

2. Rationalize the denominator

$$\frac{9}{\sqrt{3x^2y}}$$

Simplify

$$\sqrt[5]{\frac{64x^{15}}{y^{20}}}$$

5. Simplify

$$3x\sqrt{8xy^2} - 5y\sqrt{32x^3} + \sqrt{18xy^2}$$