

$$(\sqrt{8} + \sqrt{12})^2$$

$$(\sqrt{8} + \sqrt{12})(\sqrt{8} + \sqrt{12})$$

$$\sqrt{64} + \sqrt{96} + \sqrt{96} + \sqrt{144}$$

8

12

$$20 + 2\sqrt{96}$$

$$20 + 2 \cdot \sqrt{16} \cdot \sqrt{6}$$

$$20 + 4\sqrt{6}$$

$$20 + 8\sqrt{6}$$

$$\sqrt{30a^3}$$

$$a\sqrt{30a}$$

$$2\sqrt{3} + 4\sqrt{75}$$

$$2\sqrt{3} + 4 \cdot \sqrt{25} \cdot \sqrt{3}$$

$$2\sqrt{3} + 20\sqrt{3}$$

$$22\sqrt{3}$$

$$2\sqrt{2} + 3\sqrt{250}$$

$$3 \cdot \sqrt{25} \cdot \sqrt{10}$$

$$2\sqrt{2} + 15\sqrt{10}$$

$$5\sqrt{2} + \sqrt{8} + 2\sqrt{338}$$

$$5\sqrt{2} + \sqrt{4} \sqrt{2} + 2\sqrt{169} \sqrt{2}$$

$$5\sqrt{2} + 2\sqrt{2} + 2 \cdot 13 \sqrt{2}$$

$$5\sqrt{2} + 2\sqrt{2} + 26\sqrt{2}$$

$$\sqrt{\frac{9}{4}} = \frac{\sqrt{9}}{\sqrt{4}} = \frac{3}{2}$$

Rationalize The Denom.

$$\sqrt{\frac{9}{2}} = \frac{\sqrt{9}}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{3\sqrt{2}}{2}$$