

Simplify:

$$\frac{1}{\sqrt[4]{2}}$$

$$\sqrt[4]{\frac{5}{64}}$$

$$\frac{2}{\sqrt[4]{8x}}$$

Simplify:

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

$$\frac{10+5\sqrt{3}}{4+\cancel{2\sqrt{3}}-\cancel{2\sqrt{3}}-\sqrt{9}} = \frac{10+5\sqrt{3}}{4-3} = 10+5\sqrt{3}$$

Conjugate

$$(a+\sqrt{b})(a-\sqrt{b})$$

Simplify:

$$\frac{2(4+\sqrt{6})}{(4-\sqrt{6})(4+\sqrt{6})} = \frac{8+2\sqrt{6}}{16+\cancel{4\sqrt{6}}-\cancel{4\sqrt{6}}-\sqrt{36}}$$
$$\frac{8+2\sqrt{6}}{16-6} = \frac{8+2\sqrt{6}}{10}$$
$$= \frac{4+\sqrt{6}}{5}$$

Simplify:

$$\frac{\sqrt{3}(\sqrt{u} + \sqrt{6})}{\sqrt{u} - \sqrt{6}} \cdot (\sqrt{u} + \sqrt{6})$$

$$\frac{\sqrt{3u} + \sqrt{18}}{u + \sqrt{6u} - \sqrt{6u} - 6}$$

$$\frac{\sqrt{3u} + \sqrt{18}}{u - 6}$$

$$\frac{\sqrt{3u} + 3\sqrt{2}}{u - 6}$$

$$\frac{\sqrt{5}(\sqrt{x} - \sqrt{2})}{\sqrt{x} + \sqrt{2}} \cdot (\sqrt{x} - \sqrt{2})$$

$$\frac{\sqrt{5x} - \sqrt{10}}{x - \sqrt{2x} + \sqrt{2x} - 2}$$

$$\frac{\sqrt{5x} - \sqrt{10}}{x - 2}$$

Simplify:

$$\frac{\frac{\sqrt{x}+\sqrt{7}}{\sqrt{x}-\sqrt{7}} (\sqrt{x}+\sqrt{7})}{x+\sqrt{7}x-\sqrt{7}x-7}}$$

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$$\frac{x+\sqrt{7}x+\sqrt{7}x+7}{x+2\sqrt{7}x+7}$$

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$$\frac{x-7}{x-7}$$

$$\frac{\sqrt{p}+\sqrt{2}}{\sqrt{p}-\sqrt{2}}$$

$$\frac{p+2\sqrt{2}p+2}{p-2}$$

8.5

271-281 odd