

You may have thought that the  $\sqrt{a}$  in the top and the bottom would simplify to 1. That kind of simplification would hold only if  $\sqrt{a}$  were a *factor* of the denominator. Multiply the numerator and denominator by the conjugate of the denominator:

$$\frac{\sqrt{a}}{\sqrt{a}-5} \cdot \frac{\sqrt{a}+5}{\sqrt{a}+5}$$

Use FOIL. Simplify radicals. The correct answer is:  $\frac{a+5\sqrt{a}}{a-25}$