Division of Radicals Answer Key

Lions, Square Roots, and Fractions, Oh My

Simplify. The answer should not have radicals in the denominator.

1. $\sqrt{\frac{3}{15}}$

   $\frac{\sqrt{5}}{5}$

2. $\sqrt{\frac{60}{45}}$

   $\frac{\sqrt{12}}{3}$

3. $\frac{\sqrt{10}}{\sqrt{2}}$

   $\sqrt{5}$

4. $\frac{\sqrt{x^2+y^2}}{\sqrt{x+y}}$

   $\frac{\sqrt{x^3+x^2y+xy^2+y^3}}{x+y}$

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

   $\frac{4\sqrt{5}}{5}$

6. $\frac{7}{\sqrt{7}}$

   $\sqrt{7}$

7. $\frac{\sqrt{x^2y}}{\sqrt{xy^2}}$

   $\frac{\sqrt{xy}}{y}$

8. $\frac{\sqrt{324}}{\sqrt{392}}$

   $\frac{9\sqrt{2}}{14}$

9. $\frac{\sqrt{y^2+5y+6}}{\sqrt{y^2+3y+2}}$

   $\frac{\sqrt{y^2+4y+3}}{y+1}$

10. $\frac{\sqrt{a^2-b^2}}{\sqrt{a-b}}$

    $a+b$
