

Name: \_\_\_\_\_  
 I never thought that I would \_\_\_\_\_  
 \_\_\_\_\_, but I do/did.

Match each property with the simplified form—not all answers will be used, some may be used more than once.

\_\_\_\_\_ 1.  $\sqrt{ab}$

\_\_\_\_\_ 2.  $\sqrt{\frac{a}{b}}$

\_\_\_\_\_ 3.  $\sqrt{a^2}$

\_\_\_\_\_ 4.  $(\sqrt{a})^2$

\_\_\_\_\_ 5.  $\frac{a}{\sqrt{b}}$

A. $\sqrt{a}\sqrt{b}$	B. $a^2$	C. $a$	D. $\frac{\sqrt{ab}}{b}$
E. $\frac{\sqrt{a}}{\sqrt{b}}$	F. $ab$	G. $1$	H. $\frac{a\sqrt{b}}{b}$

*Simplify each expression. Place answer on the blank line next to problem number.*

\_\_\_\_\_ 6.  $\sqrt{60}$

\_\_\_\_\_ 7.  $-3\sqrt{98}$

\_\_\_\_\_ 8.  $\sqrt{100x^3}$

\_\_\_\_\_ 9.  $\sqrt{20x^2} \cdot \sqrt{5x^6}$

\_\_\_\_\_ 10.  $\sqrt{12} \cdot \sqrt{3x} \cdot \sqrt{2x^3}$

\_\_\_\_\_ 11.  $\sqrt{\frac{6}{25}}$

\_\_\_\_\_ 12.  $\frac{1}{\sqrt{3y}}$

\_\_\_\_\_ 13.  $\frac{6\sqrt{2}}{\sqrt{75y}}$

\_\_\_\_\_ 14.  $\sqrt{\frac{35}{15y}}$

\_\_\_\_\_ 15.  $\sqrt{\frac{x^2}{144}}$

\_\_\_\_\_ 16.  $7\sqrt{2} - 2\sqrt{2} + 9\sqrt{2}$

\_\_\_\_\_ 17.  $3\sqrt{12} + 5\sqrt{18} - 7\sqrt{3}$

\_\_\_\_\_ 18.  $\sqrt{3}(1 + \sqrt{12})$