

Name: _____

Multiplying and Dividing Radicals



Directions: Simplify each of the following.

1.) $\sqrt{3} \times \sqrt{2} =$ _____

9.) $\sqrt{10} \times \sqrt{8} =$ _____

2.) $\sqrt{2} \times \sqrt{2} =$ _____

10.) $\sqrt{6} \times \sqrt{5} =$ _____

3.) $\sqrt{\frac{15}{3}} =$ _____

11.) $\sqrt{\frac{49}{9}} =$ _____

4.) $\sqrt{5} \times \sqrt{10} =$ _____

12.) $\sqrt{\frac{15}{12}} =$ _____

5.) $\sqrt{\frac{24}{2}} =$ _____

13.) $\sqrt{12} \times \sqrt{42} =$ _____

6.) $\sqrt{7} \times \sqrt{7} =$ _____

14.) $\frac{\sqrt{4}}{4\sqrt{5}} =$ _____

7.) $\frac{\sqrt{9}}{\sqrt{25}} =$ _____

15.) $\sqrt{30} \times \sqrt{5} =$ _____

8.) $\sqrt{2} \times \sqrt{6} =$ _____

16.) $\sqrt{14} \times \sqrt{28} =$ _____

ANSWER KEY

1.) $\sqrt{3} \times \sqrt{2} = \sqrt{6}$

9.) $\sqrt{10} \times \sqrt{8} = 4\sqrt{25}$

2.) $\sqrt{2} \times \sqrt{2} = \sqrt{4} = 2$

10.) $\sqrt{6} \times \sqrt{5} = \sqrt{30}$

3.) $\sqrt{\frac{15}{3}} = \sqrt{5}$

11.) $\sqrt{\frac{49}{9}} = \sqrt{7}$

4.) $\sqrt{5} \times \sqrt{10} = 5\sqrt{2}$

12.) $\sqrt{\frac{15}{12}} = \frac{\sqrt{5}}{2}$

5.) $\sqrt{\frac{24}{2}} = 2\sqrt{3}$

13.) $\sqrt{12} \times \sqrt{42} = 6\sqrt{14}$

6.) $\sqrt{7} \times \sqrt{7} = \sqrt{49} = 7$

14.) $\frac{\sqrt{4}}{4\sqrt{5}} = \frac{\sqrt{5}}{10}$

7.) $\frac{\sqrt{9}}{\sqrt{25}} = \frac{3}{5}$

15.) $\sqrt{30} \times \sqrt{5} = 5\sqrt{6}$

8.) $\sqrt{2} \times \sqrt{6} = 2\sqrt{3}$

16.) $\sqrt{14} \times \sqrt{28} = 14\sqrt{2}$