

Name _____

Date _____

1) $\sqrt{6} \cdot 4\sqrt{6}$

$$\begin{array}{l} 4\sqrt{36} \\ 4(6) \\ 24 \end{array}$$

2) $-\sqrt{5} \cdot \sqrt{20}$

$$\begin{array}{l} -\sqrt{100} \\ -10 \end{array}$$

3) $-\sqrt{2} \cdot \sqrt{3}$

$$-\sqrt{6}$$

4) $4\sqrt{8} \cdot \sqrt{2}$

$$\begin{array}{l} 4\sqrt{16} \\ 4 \cdot 4 \\ 16 \end{array}$$

5) $\sqrt{12} \cdot \sqrt{15}$

$$\begin{array}{l} 2\sqrt{3} \cdot \sqrt{15} \\ 2\sqrt{45} \\ 2 \cdot 3\sqrt{5} \\ 6\sqrt{5} \end{array}$$

6) $\sqrt{5} \cdot -2\sqrt{5}$

$$\begin{array}{l} -2\sqrt{25} \\ -2 \cdot 5 \\ -10 \end{array}$$

7) $-3\sqrt{5} \cdot \sqrt{20}$

$$\begin{array}{l} -3\sqrt{5} \cdot 2\sqrt{5} \\ -6(5) \\ -30 \end{array}$$

8) $\sqrt{15} \cdot 3\sqrt{5}$

$$\begin{array}{l} 3\sqrt{75} \\ 3 \cdot 5\sqrt{3} \\ 15\sqrt{3} \end{array}$$

9) $\sqrt{9} \cdot \sqrt{3}$

$$3\sqrt{3}$$

10) $-4\sqrt{8} \cdot \sqrt{10}$

$$\begin{array}{l} -4\sqrt{80} \\ -4\sqrt{16 \cdot 5} \\ -4 \cdot 4\sqrt{5} \\ -16\sqrt{5} \end{array}$$

$$11) \frac{\sqrt{8}}{\sqrt{7}} \cdot \frac{\sqrt{7}}{\sqrt{7}} = \frac{\sqrt{8 \cdot 7}}{7} = \frac{\sqrt{56}}{7} = \frac{\sqrt{14 \cdot 4}}{7} = \frac{2\sqrt{14}}{7}$$

$$12) \frac{7}{8\sqrt{7}} \cdot \frac{\sqrt{7}}{\sqrt{7}} = \frac{7\sqrt{7}}{8 \cdot 7} = \frac{\sqrt{7}}{8}$$

$$13) \frac{\sqrt{2}}{\sqrt{6}} \cdot \frac{\sqrt{6}}{\sqrt{6}} = \frac{\sqrt{12}}{6} = \frac{2\sqrt{3}}{6} = \frac{\sqrt{3}}{3}$$

$$14) \frac{\sqrt{21}}{\sqrt{15}} = \frac{\sqrt{7}}{\sqrt{5}} \cdot \frac{\sqrt{5}}{\sqrt{5}} = \frac{\sqrt{35}}{5}$$

$$15) \frac{\sqrt{3}}{6\sqrt{7}} \cdot \frac{\sqrt{7}}{\sqrt{7}} = \frac{\sqrt{21}}{6 \cdot 7} = \frac{\sqrt{21}}{42}$$

$$16) \frac{\sqrt{5}}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{\sqrt{15}}{3}$$

$$17) \frac{\sqrt{15}}{3\sqrt{6}} = \frac{\sqrt{5}}{3\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{10}}{3 \cdot 2} = \frac{\sqrt{10}}{6}$$

$$18) \frac{\sqrt{8}}{2\sqrt{7}} \cdot \frac{\sqrt{7}}{\sqrt{7}} = \frac{\sqrt{56}}{2 \cdot 7} = \frac{\sqrt{56}}{14} = \frac{\sqrt{14 \cdot 4}}{14} = \frac{2\sqrt{14}}{14} = \frac{\sqrt{14}}{7}$$

$$19) \frac{\sqrt{14}}{3\sqrt{35}} = \frac{\sqrt{2}}{3\sqrt{5}} \cdot \frac{\sqrt{5}}{\sqrt{5}} = \frac{\sqrt{10}}{15}$$

$$20) \frac{2\sqrt{4}}{8\sqrt{3}} = \frac{2 \cdot 2}{8\sqrt{3}} = \frac{4}{8\sqrt{3}} = \frac{1}{2\sqrt{3}} = \frac{\sqrt{3}}{6}$$