

**Algebra RH**  
**Radicals Practice**

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**Simplify. All final answers must be in simplest radical form.**

1.  $\sqrt{45}$

2.  $\frac{1}{4}\sqrt{20}$

3.  $\frac{\sqrt{80}}{2}$

4.  $xy\sqrt{x^4y^3}$

5.  $\sqrt{(2y)^2}$

6.  $\frac{\sqrt{24x^2}}{2x}$

7.  $(5\sqrt{2})(\sqrt{8})$

8.  $(\sqrt{3xy})(\sqrt{6x^3y^9})$

9.  $\left(\sqrt{\frac{3}{5}}\right)(\sqrt{6})$

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

11.  $3\sqrt{2x} + 10\sqrt{8x}$

12.  $3\sqrt{2}(\sqrt{8} - 3\sqrt{6})$

13.  $4\sqrt{5} + 2\sqrt{45}$

14.  $\frac{4}{\sqrt{2}}$

15.  $\frac{10\sqrt{5} + 15\sqrt{2}}{20}$

16.  $\frac{3\sqrt{20} - 5\sqrt{45}}{6\sqrt{5}}$

17.  $\frac{4}{1-3\sqrt{5}}$

18.  $\frac{3+\sqrt{2}}{3-\sqrt{2}}$