

Name:

Period:

Date:

Practice Worksheet: Simplifying Square Root Expressions

Simplify each square root completely. Show all work.

1] $\sqrt{175}$	2] $\sqrt{336}$	3] $\sqrt{120}$
4] $\sqrt{588}$	5] $\sqrt{1215}$	6] $\sqrt{1800}$

Simplify each radical expression completely. Show all work.

7] $4\sqrt{121}$	8] $-3\sqrt{45}$	9] $\sqrt{10}\sqrt{20}$
10] $\sqrt{14}\sqrt{42}$	11] $4\sqrt{8}(\sqrt{24})$	12] $-3\sqrt{5}(2\sqrt{125})$

Simplify each square root completely so that no square roots remain in the denominator of a fraction. Show all work.

13] $\frac{\sqrt{98}}{7}$	14] $\frac{5\sqrt{50}}{30}$	15] $\frac{\sqrt{300}}{-\sqrt{25}}$
16] $\frac{\sqrt{10}}{-2\sqrt{5}}$	17] $\frac{18+\sqrt{18}}{\sqrt{81}}$	18] $\frac{6+\sqrt{98}}{2\sqrt{49}}$

Simplify each radical expression completely. Show all work.

19] $\frac{5\sqrt{147}}{14\sqrt{3}}$	20] $\left(\frac{-2\sqrt{12}}{3}\right)\left(\frac{-\sqrt{162}}{\sqrt{6}}\right)$	21] $\left(\frac{\sqrt{75}}{7}\right)\left(\frac{-10\sqrt{343}}{\sqrt{21}}\right)$
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