

Algebra I  
Review for Quiz #8  
Simplifying Radicals (13.2)

Name: \_\_\_\_\_  
Date: \_\_\_\_\_ Hour: \_\_\_\_\_

You may use a calculator on the quiz.

**Part I. Simplify each of the following.**

1.  $\sqrt{243}$  \_\_\_\_\_

2.  $\sqrt{81}$  \_\_\_\_\_

3.  $\sqrt{225}$  \_\_\_\_\_

4.  $\sqrt{63}$  \_\_\_\_\_

5.  $\sqrt{32}$  \_\_\_\_\_

6.  $\frac{\sqrt{9}}{\sqrt{4}}$  \_\_\_\_\_

7.  $\sqrt{x^5y^7}$  \_\_\_\_\_

8.  $\sqrt{75}$  \_\_\_\_\_

9.  $\sqrt{72}$  \_\_\_\_\_

**Part II. Simplify the radicals by factoring.**

1.  $\sqrt{720}$  \_\_\_\_\_

2.  $\sqrt{288}$  \_\_\_\_\_

3.  $\sqrt{4000}$  \_\_\_\_\_

**Express in simplest radical form.**

4.  $\sqrt{8}\sqrt{14}$  \_\_\_\_\_

5.  $\sqrt{3}\sqrt{27}$  \_\_\_\_\_

6.  $\sqrt{12}\sqrt{6}$  \_\_\_\_\_

7.  $\frac{\sqrt{72}}{\sqrt{6}}$  \_\_\_\_\_

8.  $\frac{\sqrt{162}}{\sqrt{3}}$  \_\_\_\_\_

9.  $\frac{\sqrt{500}}{\sqrt{50}}$  \_\_\_\_\_

10.  $\sqrt{m^6n}$  \_\_\_\_\_

11.  $\sqrt{a^8b^6}$  \_\_\_\_\_

12.  $\frac{\sqrt{x^3}}{\sqrt{y^6}}$  \_\_\_\_\_

