

Name:

Simplifying Radicals

$1^2 =$        $2^2 =$        $3^2 =$        $4^2 =$        $5^2 =$        $6^2 =$        $7^2 =$        $8^2 =$        $9^2 =$

**Simplify.**

1)  $\sqrt{75}$

2)  $\sqrt{16}$

3)  $\sqrt{36}$

4)  $\sqrt{64}$

5)  $\sqrt{80}$

6)  $\sqrt{30}$

7)  $\sqrt{8}$

8)  $\sqrt{18}$

9)  $\sqrt{32}$

10)  $\sqrt{12}$

11)  $\sqrt{8}$

12)  $\sqrt{108}$

13)  $\sqrt{125}$

14)  $\sqrt{50}$

15)  $\sqrt{175}$

16)  $\sqrt{28}$

Notes

$$\sqrt{xy} =$$

$$\frac{\sqrt{x}}{\sqrt{y}} =$$

$$(\sqrt{x})^2 =$$

$$\sqrt{x} + \sqrt{x} + \sqrt{y} =$$

$$\frac{6}{\sqrt{2}} =$$

$$(2\sqrt{5})(7\sqrt{3}) =$$

**Simplify**

17)  $\frac{\sqrt{20}}{\sqrt{5}}$

18)  $(5\sqrt{2})(5\sqrt{2})$

19)  $(\sqrt{6})^2$

20)  $(3\sqrt{7})^2$

21)  $(2\sqrt{3})(5\sqrt{2}) - (4\sqrt{2})\sqrt{3}$

22)  $2\sqrt{5} + 5\sqrt{2} - \sqrt{5}$

23)  $\frac{9}{\sqrt{3}}$

24)  $4\sqrt{27}$