

4.6.0 Review of Simplifying Radicals and solving with Square Roots

Period _____

I. Simplify.

1) $\sqrt{27}$

2) $\sqrt{150}$

3) $\sqrt{54}$

4) $\sqrt{12}$

5) $\sqrt{48}$

6) $\sqrt{98}$

7) $\sqrt{18}$

8) $\sqrt{63}$

9) $\sqrt{128}$

10) $\sqrt{112}$

11) $\sqrt{512}$

12) $\sqrt{72}$

13) $\sqrt{175}$

14) $\sqrt{384}$

II. Solve each equation by taking square roots. Leave all answers in SIMPLIFIED radical form (no decimals).

15) $r^2 = 44$

16) $x^2 = 100$

17) $b^2 = 9$

18) $n^2 = 81$

$$19) \ 64x^2 = 1$$

$$20) \ v^2 + 9 = 10$$

$$21) \ 8r^2 = 224$$

$$22) \ 9n^2 = 756$$

$$23) \ 5n^2 + 1 = 281$$

$$24) \ 7m^2 + 2 = 198$$

$$25) \ 4x^2 + 1 = 109$$

$$26) \ 6x^2 + 5 = 17$$