Algebra 1 BOOTCAMP (Day 7) Name_____

Simplifying Square Roots

Date_____ Period____

Simplify.

1) $\sqrt{147}$

2) $\sqrt{64}$

3) $\sqrt{192n^4}$

4) $\sqrt{448b}$

5) $-3\sqrt{343x^2}$

6) $8\sqrt{147v}$

Simplify by adding or subtracting.

7) $3\sqrt{5}+3\sqrt{5}$

8) $-\sqrt{3}-\sqrt{3}$

9) $-\sqrt{8}+3\sqrt{18}$

10) $-3\sqrt{45}-2\sqrt{45}$

Simplify by multiplying.

11) $\sqrt{2} \cdot \sqrt{8}$

12) $\sqrt{3} \cdot \sqrt{3}$

13) $\sqrt{5}(-4\sqrt{5} + 3)$

14) $\sqrt{10}(\sqrt{2} + 4)$

Solve each equation. Remember to check for extraneous solutions.

15) $-2 + \sqrt{2x} = 6$

16) $\sqrt{\frac{x}{4}} = 4$

17) $13 = 6 + \sqrt{7k}$

18) $\sqrt{k-2} = 6$

19) $-6 + \sqrt{\frac{x}{6}} = 2$

20) $-4\sqrt{143x + 1} = -48$