

## 4-3 Simplify complex (imaginary) numbers

Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve each equation by factoring.**

1)  $(x - 5)(7x - 3) = 0$

2)  $(v - 8)(v - 6) = 0$

3)  $k^2 - k - 6 = 0$

4)  $n^2 - 4n = 0$

**Solve each equation with the quadratic formula.**

5)  $4m^2 - 3 = 0$

6)  $3p^2 - 11p - 18 = 0$

**Simplify.**

7)  $\sqrt{-256}$

8)  $\sqrt{-18}$

9)  $\sqrt{-147}$

10)  $\sqrt{-28}$

11)  $\sqrt{-252}$

12)  $\sqrt{-27}$

**Solve each equation by taking square roots.**

13)  $k^2 = 38$

14)  $n^2 = -87$

15)  $n^2 = 57$

16)  $x^2 = 64$

17)  $x^2 = -21$

18)  $9x^2 - 7 = 722$

19)  $10p^2 + 8 = 48$

20)  $5v^2 + 10 = 190$