

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) $5v^2 + 10 = 190$