

5.2 Solving Equations Using the Square Root Property

Name _____

Solve each equation by applying the square root property.	
1. $x^2 = 36$	2. $x^2 = 121$
3. $x^2 = -36$	4. $x^2 = -121$
5. $(x + 2)^2 = 36$	6. $(x - 1)^2 = 25$
7. $(3x + 5)^2 = 1$	8. $(4x - 5)^2 = 4$
Answers: 1. $\{\pm 6\}$; 3. $\{\pm 6i\}$; 5. $\{-8, 4\}$; 7. $\left\{-\frac{4}{3}, -2\right\}$	

Solve each equation by applying the square root property.

9. $(x + 2)^2 = -36$

10. $(x - 1)^2 = -25$

11. $(2x + 5)^2 = 9$

12. $(2x + 1)^2 = 49$

13. $(2x + 3)^2 = -25$

14. $(2x + 7)^2 = -1$

15. $(6x - 2)^2 = 20$

16. $(4x + 2)^2 = 40$

Answers: 9. $\{-2 \pm 6i\}$; 11. $\{-1, -4\}$; 13. $\frac{-3 \pm 5i}{2}$; 15. $\left\{ \frac{1 \pm \sqrt{5}}{3} \right\}$