

# Reasoning with Equation and Inequalities - Worksheet 4

Solve the following equations:

1.  $x^2 + 6x + 9 = 0$

6.  $(3x + 2)^2 + 8 = 9$

2.  $2x^2 + 4x + 8 = 0$

7.  $4x^2 - 7x + 4 = 3x + 2$

3.  $(x - 1)^2 - 7 = 3$

8.  $\frac{1}{2}x^2 + 6x - \frac{5}{2} = 1$

4.  $x^2 + 4x = 2$

9.  $3x^2 + 6x = -2$

5.  $\frac{1}{2}x^2 - 3x + 4 = 0$

10. For what values of  $b$  does the equation  $x^2 + bx + 4 = 0$  have one solution?

---

©2013 Shmoop University, Inc. All rights reserved. For classroom use only. Want to print this out for your classroom? Go for it. All other reproduction and distribution is prohibited.

<http://www.shmoop.com/pre-algebra/>  
Shmoop will make you a better lover (of literature, math, life...)