Algebra 2 - Mr. C. Name_____

# Q1P4 - Ch. 2-3 Solving Quadratic Eq. By Factoring Date_____ Period____



**Solve each equation by factoring. These have an "a" of 1.**

1) $r^2 + 7 = -8r$

2) $b^2 = -48 + 14b$

3) $x^2 = -18 - 9x$

4) $a^2 - 7a = -6$

5) $n^2 + 1 = 2n$

6) $v^2 = -6v + 7$

**Solve each equation by factoring. These do NOT have an "a" of 1, must FBG.**

7) $6x^2 - 35x = -49$

8) $25n^2 = -15n + 4$

9) $3r^2 + 10 = -17r$

10) $7x^2 = -18 - 27x$

11) $15k^2 = -5 - 28k$

12) $4x^2 - 6 = 23x$

13) $15n^2 + 22n = 5$

14) $3p^2 + 8 = -25p$

15) $8m^2 = 55m - 42$

16) $35n^2 + 12 = 41n$

**Solve each equation by factoring. Watch for special cases!**

17) $x^2 + 8x = 0$

18) $v^2 - 4 = 0$

19) $v^2 + 12v + 36 = 0$

20) $m^2 + 6m + 9 = 0$

# Answers to Q1P4 - Ch. 2-3 Solving Quadratic Eq. By Factoring (ID: 1)

1) $\{-7, -1\}$
2) $\{6, 8\}$
3) $\{-3, -6\}$
4) $\{6, 1\}$
5) $\{1\}$
6) $\{1, -7\}$
7) $\left\{\frac{7}{2}, \frac{7}{3}\right\}$
8) $\left\{-\frac{4}{5}, \frac{1}{5}\right\}$
9) $\left\{-\frac{2}{3}, -5\right\}$
10) $\left\{-\frac{6}{7}, -3\right\}$
11) $\left\{-\frac{5}{3}, -\frac{1}{5}\right\}$
12) $\left\{-\frac{1}{4}, 6\right\}$
13) $\left\{\frac{1}{5}, -\frac{5}{3}\right\}$
14) $\left\{-\frac{1}{3}, -8\right\}$
15) $\left\{\frac{7}{8}, 6\right\}$
16) $\left\{\frac{3}{5}, \frac{4}{7}\right\}$
17) $\{-8, 0\}$
18) $\{-2, 2\}$
19) $\{-6\}$
20) $\{-3\}$