

## Assignment 7: Solving Quadratic Equations by Factoring Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve each equation by factoring.**

1)  $(m - 4)^2 = 0$

2)  $(r + 3)(r + 4) = 0$

3)  $(x + 4)(x + 2) = 0$

4)  $(n - 5)^2 = 0$

5)  $(b - 5)(b + 2) = 0$

6)  $(5v - 1)(v + 3) = 0$

7)  $(5x - 3)(x - 4) = 0$

8)  $(n - 2)(5n + 2) = 0$

9)  $(a - 2)(a + 4) = 0$

10)  $(k - 1)(k + 1) = 0$

11)  $x^2 + 9x = -8$

12)  $x^2 = 4x$

13)  $n^2 - 14n = -49$

14)  $m^2 - 32 = -4m$

15)  $p^2 + 40 = 13p$

16)  $2x^2 + 56 = -22x$

17)  $8n^2 - 88n = -192$

18)  $b^2 - 12 = -b$

19)  $7r^2 - 77r = -168$

20)  $6x^2 = 96$

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1)  $(m - 4)^2 = 0$

 $\{4\}$ 

2)  $(r + 3)(r + 4) = 0$

 $\{-3, -4\}$ 

3)  $(x + 4)(x + 2) = 0$

 $\{-4, -2\}$ 

4)  $(n - 5)^2 = 0$

 $\{5\}$ 

5)  $(b - 5)(b + 2) = 0$

 $\{5, -2\}$ 

6)  $(5v - 1)(v + 3) = 0$

 $\left\{\frac{1}{5}, -3\right\}$ 

7)  $(5x - 3)(x - 4) = 0$

 $\left\{\frac{3}{5}, 4\right\}$ 

8)  $(n - 2)(5n + 2) = 0$

 $\left\{2, -\frac{2}{5}\right\}$ 

9)  $(a - 2)(a + 4) = 0$

 $\{2, -4\}$ 

10)  $(k - 1)(k + 1) = 0$

 $\{1, -1\}$ 

11)  $x^2 + 9x = -8$

 $\{-8, -1\}$ 

12)  $x^2 = 4x$

 $\{4, 0\}$ 

13)  $n^2 - 14n = -49$

 $\{7\}$ 

14)  $m^2 - 32 = -4m$

 $\{4, -8\}$ 

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 $\{-4, 4\}$