

# 9.1 Greatest Common Factor

Algebra 1

Name: \_\_\_\_\_

**CA #2**

**Factor the following if possible.**

1. $12x - 8$	2. $3y^2 + 15y$	3. $7t^2 - 10t$
4. $2x^4 + 18x^3 - 3x^2$	5. $6x^2 - 9x + 15$	6. $12x^3 + 24x^2 - 18x$

**Use the Zero Product Rule to solve the following factored equations.**

7. $2x(x - 3) = 0$	8. $3(2x - 5) = 0$	9. $0 = (2t + 3)(t - 1)$
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10. $(2d - 7)(3d + 5) = 0$	11. $0 = 4x(2x + 1)(x - 5)$
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**Solve the following by factoring.**

12. $3x^2 - 6x = 0$	13. $2x = 6x^2$
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**Solve the following by factoring.**

14.  $15y^2 - 9y = 0$

15.  $6f = 8f^2 + 2f$

**Answers to 9.1 CA #2**

1. $4(3x - 2)$	2. $3y(y + 5)$	3. $t(7t - 10)$	4. $x^2(2x^2 + 18x - 3)$
5. $3(2x^2 - 3x + 5)$	6. $6x(2x^2 + 4x - 3)$	7. $x = 0, 3$	8. $x = \frac{5}{2}$
9. $t = -\frac{3}{2}, 1$	10. $d = -\frac{5}{3}, \frac{7}{2}$	11. $x = -\frac{1}{2}, 0, 5$	12. $x = 0, 2$
13. $x = 0, \frac{1}{3}$	14. $y = 0, \frac{3}{5}$	15. $f = 0, \frac{1}{2}$	