

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

Geometry  
Quiz 4

In 1-8, factor completely.

1.  $6x + 27$

2.  $14x^3y^5 - 21x^5y^2$

3.  $a^2 - 10a + 25$

4.  $m^2 - 49$

5.  $3d^2 - d - 10$

6.  $t^2 + 6t - 55$

7.  $\frac{6xy - 2x^2}{x - 3y}$

8.  $\frac{8 - x}{x^2 + x - 72}$

9.  $8x^2 - 32$

In 10-15, solve for x.

REMINDER: Get everything into the form  $ax^2 + bx + c = 0$

10.  $x^2 - 71 = 10$

11.  $5x^2 = 3x - 2$

12.  $5d^2 = 125$

13.  $3x^2 + 8 = 35$

14.  $x^2 + 14x = -40$

15.  $3x^2 + 8x + 5 = 0$

BONUS: Write an equation in the form  $ax^2 + bx + c = 0$  if the solution of the equation is 4 and -2.