

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

## Solving Equations by Factoring

Solve each of the following equations.

1)  $x^2 - 6x = 0$

2)  $m^2 + 36m = 0$

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

4)  $4x^2 - 9 = 0$

5)  $a^2 - 81 = 0$

6)  $16x^2 = 64$

7)  $4s^2 = -36s$

8)  $y^2 = 7y$

9)  $x^2 = -8x$

10)  $6y = -3y^2$

11)  $x^2 = 36$

12)  $y^2 = 64$

13)  $y^2 = -5y$

14)  $\frac{1}{2}y^2 - \frac{1}{4}y = 7$

15)  $3y^2 - \frac{3}{4} = 0$

16)  $\frac{2}{3}y = \frac{1}{3}y^2$

17)  $5x^2 = 45$

18)  $2y^2 - 98 = 0$

19)  $4y^2 - 16 = 0$

20)  $m^2 - 24m + 144 = 0$

21)  $y^2 + 10y = -25$

22)  $25x^2 + 20x = -4$

23)  $81n^2 + 36n = -4$

24)  $9y^2 = -42y - 49$

25)  $y^2 - \frac{16}{81} = 0$

26)  $\frac{5}{6}x^2 = \frac{2}{3}x$

27)  $\frac{3}{4}x^2 - \frac{1}{8}x = 0$

28)  $x^2 + 13x + 36 = 0$