

## HW 1-1 GCF, Multistep, Solving by GCFs

Date \_\_\_\_\_ Period \_\_\_\_\_

**Factor each completely.**

1)  $15n^2 + 40n$

2)  $8x^2 - 4x$

3)  $6x^2 - 42x$

4)  $-5p^2 + 30p$

5)  $3x(x + 1) - 5(x + 1)$

6)  $-4x^4 - 20x^2$

**Solve each equation.**

7)  $x - 1 = x + 6 + x - 3$

8)  $1 - 8p + 4 = 8 - 5p$

9)  $-x - 2x = -14 - 8x + 7x$

10)  $\frac{1}{2}x + 3 = 7$

$$11) 6 + \frac{3}{5}x = 12$$

$$12) 7(m - 6) = -84$$

**Solve each equation by factoring.**

$$13) v^3 = -2v^2$$

$$14) 10x^2 = -5x$$

$$15) 4k^2 - 56k = 0$$

$$16) 12x^2 = -4x$$

**Solve each equation.**

$$17) 4(8a - 8) = -160$$

$$18) x^2 = -6x$$

$$19) n^2 + 2n = 0$$

$$20) 4k - 8 = 12 + 2k$$