

Factoring Trinomials ( $a = 1$ )

Factor each completely.

1)  $b^2 + 8b + 7$

2)  $n^2 - 11n + 10$

3)  $m^2 + m - 90$

4)  $n^2 + 4n - 12$

5)  $n^2 - 10n + 9$

6)  $b^2 + 16b + 64$

7)  $m^2 + 2m - 24$

8)  $x^2 - 4x + 24$

Solve each equation by using the zero product property.

1)  $(n - 5)(n + 3) = 0$

2)  $(x - 3)(x + 1) = 0$

3)  $(a + 3)(a + 8) = 0$

4)  $m(m + 7) = 0$

5)  $(3x - 8)(x - 3) = 0$

6)  $(3p + 1)(8p - 3) = 0$

7)  $(a - 7)(a - 3) = 0$

8)  $(4v + 5)(v + 7) = 0$

9)  $3p(5p - 1) = 0$

10)  $(v + 8)^2 = 0$

Solve each equation by factoring.

1)  $x^2 + 10x + 21 = 0$

2)  $a^2 + 7a - 8 = 0$

3)  $k^2 + 2k - 35 = 0$

4)  $4x^2 + 20x - 24 = 0$

5)  $3n^2 - 75 = 0$

6)  $v^2 - 5v = 0$

Algebra 1 Summary Assignment Week 2

**Factor Completely. If non-factorable, say so.**

1. $2a^2 - 6a$	2. $x^2 - 26x + 25$
3. $x^2 + 12x + 36$	4. $y^2 - 4y - 45$
5. $w^2 - 6w + 7$	6. $2x^2 + 10x + 8$

**Solve for x. Show all work. Circle your answers.**

7. $x^2 - 3x = 0$	8. $(2x - 5)(x + 7) = 0$
9. $x^2 + 2x - 15 = 0$	10. $x^2 + 5x = 24$