

## 8.2 Factoring Using the Distributive Property Guided Notes

**Objective:**

**Factoring:**

**Steps to Factoring out GCF:**

1.

2.

3.

4.

**Examples:** Factor completely

1)  $16a + 4b$

2)  $3p^2q - 9pq^2 + 36pq$

3)  $-44x - 110x^2$

4)  $49xy + 17ab$

**Factoring by Grouping:**

**In order to use Factoring by Grouping, the following must be true:**

1.

2.

3.

**Examples:** Factor completely

5)  $4ab + 8b + 3a + 6$

**STEPS**

6)  $35x - 5xy + 3y - 21$

**Zero Product Property:**

**Roots:**

**Examples:** Solve each equation

7)  $(a + 3)(7a - 4) = 0$

8)  $7x^2 = 35x$