

Greatest Common Factor /  
Grouping

1. Factor out the greatest common  
factor:

$$9x - 81$$

2. Factor out the greatest common  
factor:

$$10x^2 + 25x$$

3. Factor out the greatest common  
factor:

$$-3x^3 + 12x^2 - 9x$$

4. Factor out the greatest common  
factor:

$$7x(3x + 2) + 2(3x + 2)$$

5. Factor out the greatest common  
factor:

$$(3b + 2)(b + 1) + (5b + 2)(b + 1)$$

6. Factor by grouping:

$$3x + ax - 3y - ay$$

7. Factor by grouping:

$$4a^2 - 28a - 8a + 56$$

8. Factor by grouping:

$$36x^2 - 18xy - 4xy + 2y^2$$