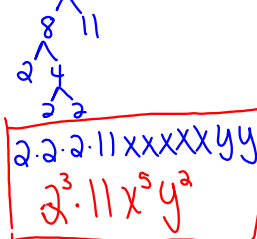


# Factoring

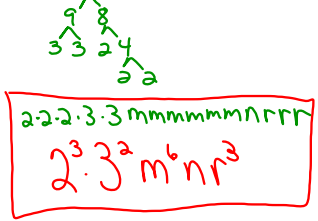
## The Greatest Common Factor

Write the prime factorization in 2 ways.

1.  $88x^5y^2$

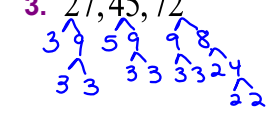


2.  $72m^6nr^3$



Find the greatest common factor.

3. 27, 45, 72



~~27: 3 · 3 · 3~~  
~~45: 3 · 3 · 5~~  
~~72: 2 · 2 · 2 · 3 · 3~~  
 $3 \cdot 3 = 9$

4.  $22r^3s^6t, 88r^4s^3t^5, 110r^2s^2t^2$

$22r^2s^2t$

Factor each expression.

5.  $8m^2n - 12m^5$

$4m^2(2n - 3m^3)$

6.  $45x^4yz^2 - 30x^3y^5z^3 + 55x^6y^3z^9$

$5x^3yz^2(9x - 6y^4z + 11x^3z^7)$

**Conclusion**

1. What must you do to find the greatest common factor?

*Factor Tree*

2. How do you work with the variables?

*Smallest exponent*

3. Questions????

# Assignment

## Factoring Wkst #1