## Factoring the GCF

Def: The greatest common factor is the largest factor common to all terms.

Ex: Factor out the GCF.



## Factor by Grouping

Given a quadratic,

Grouping number:

B-term:

12

-7

Ex:

## Trial and Error /Reverse Foil

Recall:

So When asked to factor we are looking for two numbers that multiply to 80 but whose sum or difference is 24.

Recall:

In the case of we have a tougher job than just finding two numbers that multiply to -21 and add to -5 we actually need to do some guessing and checking or we could use factor by grouping:

-126

9 -14

-5

Ex: Factor



## Factoring Difference of Squares and Perfect Square Trinomials

Ex: Factor each

Given a quadratic equation of the form

If are perfect square numbers and:

1. and is a negative number Difference of Squares so it factors to

1. and is a positive number Prime polynomial so it won’t factor
2. Perfect square trinomial so it factors to

* if b is a positive number
* if b is a negative number