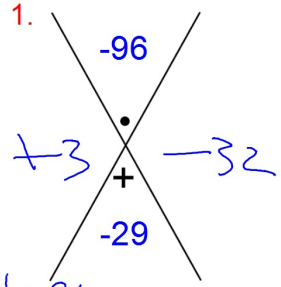
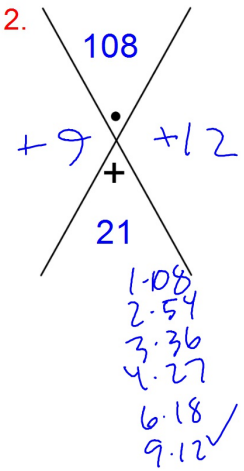
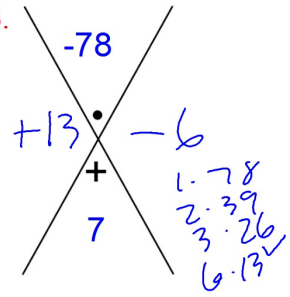
1.



2.

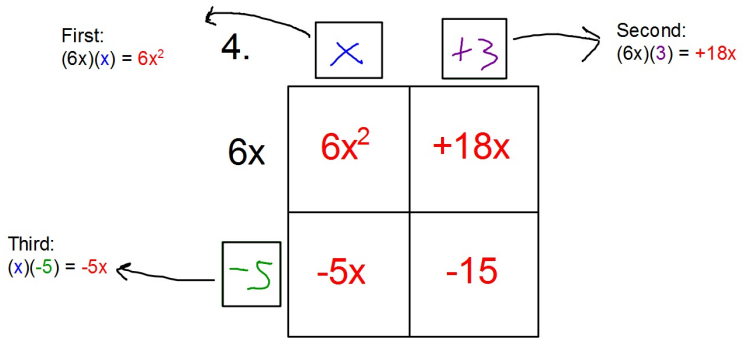


3.



Expanding Jeopardy: The work for exanding two binomials is shown but some of the begining information has been lost. Can you fill in the missing information?

4.



5.

	7x	-8
x	$7x^2$	-8x
-7	-49x	+56

6.

	2x	+1
3x	$6x^2$	+3x
+8	+16x	+8

7.

	4x	+9
9x	$36x^2$	+81x
-2	-8x	-18

What do you do if ALL of the outside terms are missing?

	$5x^2$	+20x
	+8x	+32

Start with the GCF of the top row.

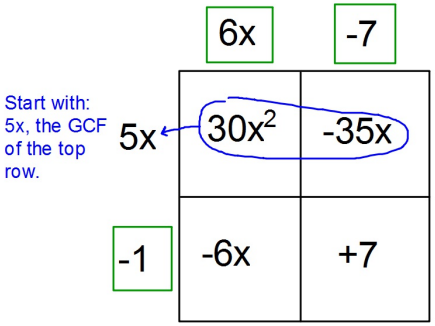
3x	$6x^2$	-9x
	+16x	-24

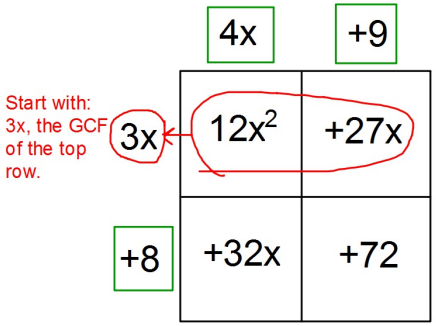
Once you've found the GCF of the top row you can continue around the Box and find the remaining three parts.

	2x	-3
3x	$6x^2$	-9x
+8	+16x	-24

Second: (3x)(-3) = -9x

Third: (2x)(8) = +16x



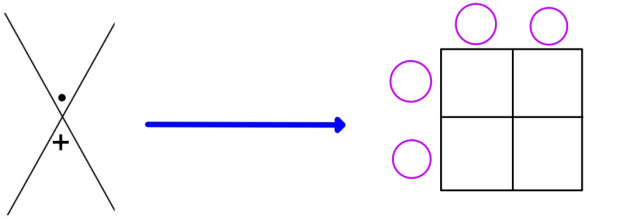


Factoring Trinomials:

$x^2 + 4x - 12 = (x + 6)(x - 2)$

It starts with

and ends with



Standard Form of a Quadratic:

$ax^2 + bx + c$

a is the coefficient of the quadratic term

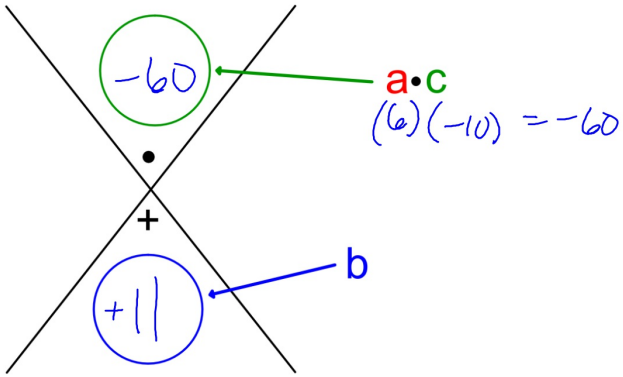
b is the coefficient of the linear term

c is the constant

1st Step

Factor

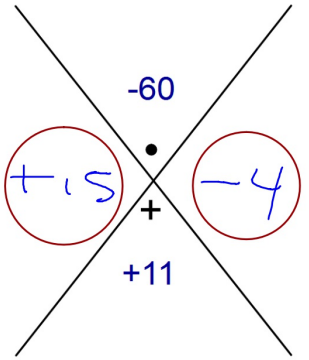
$6x^2 + 11x - 10$



Step 2: Find two numbers that multiply to -60 and add to +11. Put these on the left and right of the X.

Factor

$6x^2 + 11x - 10$

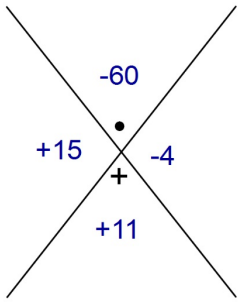


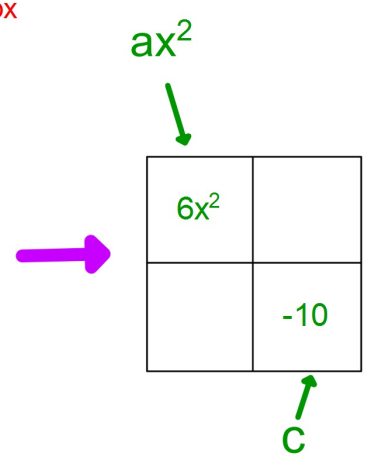
Step 3: Fill in the Box

Upper left corner and lower right corner are always.....

Factor

$6x^2 + 11x - 10$



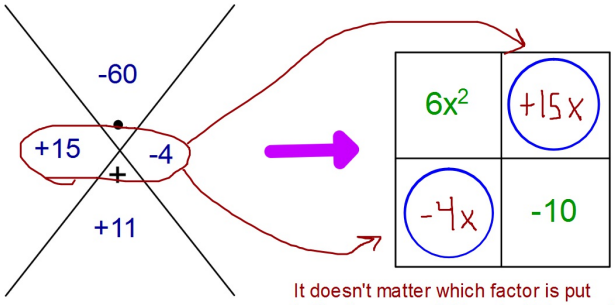


Step 3: Fill in the Box

Finish filling in the upper right and lower left using....

Factor

$6x^2 + 11x - 10$



It doesn't matter which factor is put in the the upper right and which goes into the lower left. But they both must have the variable x because they are the terms that are going to combine to +11x.

$6x^2 + 11x - 10$

Step 4: Start factoring by finding....

GCF of top row → 3x

$6x^2$	+15x
- 4x	-10

Finish by finding the other three missing parts

	2x	+5
3x	$6x^2$	+15x
-2	-4x	-10

Show the factored form by using parentheses

$6x^2 + 11x - 10 = (2x + 5)(3x-2)$

Factor

1. $8b^2 + 22b + 5 = (\ 2b+5\ )(\ 4b+1\ )$

a·c

40

20 2 22

b

	4b	+1
2b	$8b^2$	2b
+5	20b	+5

2. $8c^2 - 19c + 6 = (\ c - 2\ )(\ 8c - 3\ )$

48

-3 -16 -19

	c	-2
8c	$8c^2$	-16c
-3	-3c	+6