

## Factoring Simple Trinomials (day 2)

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⊗ For SPF Method if the product is positive  
BOTH "magic numbers" have the same sign  
↳ pos, pos OR neg, neg

⊗ IF the product is negative the "magic numbers" will have different signs → pos, neg

Ex. Factor fully :

$$\textcircled{1} \quad x^2 + \overset{S}{2x} - \overset{P}{15}$$

$$S = 2 \\ P = -15$$

$$(x-3)(x+5)$$

-15	
-1	15
1	-15
-3	5
3	-5

$$\textcircled{2} \quad x^2 - \overset{S}{1x} - \overset{P}{30}$$

$$S = -1 \\ P = -30$$

$$(x+5)(x-6)$$

-30	
-1	30
1	-30
-2	15
2	-15
-3	10
3	-10
-5	6
5	-6

⊗  $\textcircled{3} \quad \frac{2x^2}{2} + \frac{10x}{2} + \frac{12}{2}$

Coefficient, GCF 1<sup>st</sup>

$$\textcircled{2} \quad \textcircled{3} \quad \left( \frac{2x}{2} + \frac{10x}{2} + \frac{12}{2} \right)$$

$$2(x^2 + 5x + 6)$$

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

coefficient, GCF 1st

$$s = 5$$

$$p = 6$$

magic numbers = 2, 3