

5.2 Factoring Trinomials

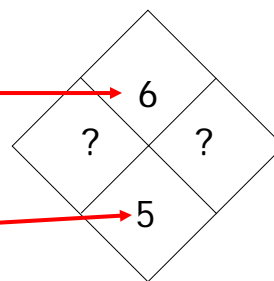
- Need To Know
 - Diamond puzzle
 - Idea of reverse FOIL
 - Factoring Trinomials



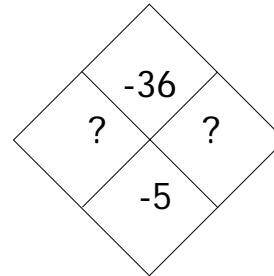
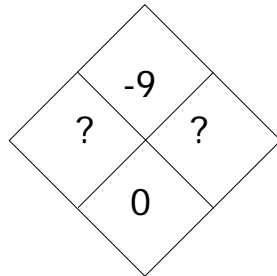
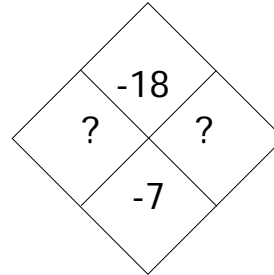
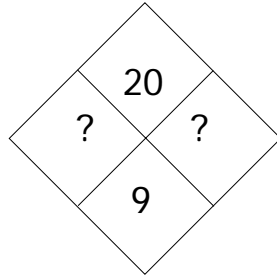
Diamond Puzzle

This number skill game builds the mental skills you need to become good at factoring.

Find two numbers that
multiply to the top number
and
add to the bottom number.



Practice



The Foil Method in Reverse

Multiply:

$$(z - 4)(z + 5)$$

Short Cut: **FOIL**

F – first terms mult.

O – outer terms mult.

I – inner terms mult.

L – last terms mult.



Factoring Trinomials

Factor:

$$x^2 + 5x + 6$$

Factor:

$$z^2 - 7z + 6$$



Factoring Trinomials w/ GCF

Factor:

$$2a^2 - 2a - 24$$

Factor:

$$3z^3 + 18z^2 + 15z$$



Factoring Trinomials w/ 2 Vars

Factor:

$$x^2 + 7xy + 12y^2$$

Factor:

$$z^2 - 3za - 10a^2$$

end