Quiz!

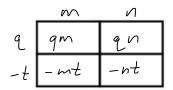
a)
$$5(x-3)$$

= $5x-/5$

$$\begin{array}{c|c} x & -3 \\ 5 & 5x & -15 \end{array}$$

c)
$$(m+n)(q-t)$$

= $9m+9n-mt-nt$



- 2. Factor. [8]
- a) 3x-12 = 3(x-4)

$$\begin{array}{c|c} x & -4 \\ 3 & 3_x & -12 \end{array}$$

c)
$$xy+5x-2y-10$$

= $(x-2)(y+5)$

b)
$$-3x(2x^2-4x+1)$$

= $-6x^3+12x^2-3x$

$$\frac{2x^2 - 4x}{-3x - 6x^3} \frac{1}{2x^2} \frac{1}{-3x}$$

d)
$$(5x-3y)(2w+z)$$

= $10wx - 6wy + 5xz - 3yz$

	5x	-3y
2w	10 wx	-6wy
3	5xz	-343

b)
$$6x^{3} + 14x^{2} - 8xy$$

$$= (2x \times 3x^{2} + 7x - 4y)$$

$$3x^2 \quad 7x \quad -4y$$

$$2x \quad 6x^3 \quad 14x^2 \quad -8xy$$

d)
$$6ax - 4ay - 15bx + 10by$$

= $2a(3x - 2y) - 5b(3x - 2y)$
= $(3x - 2y)(2a - 55)$

$$3x - 2y$$

 $2a 6ax - 4ay$
 $-56 - 15bx 106y$

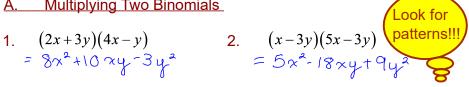
4.4B More Multiplying Binomials & Factoring Complex Trinomials.notebookNovember 11, 2022

4.4B More Mulitplying Binomials & Factoring Complex Trinomials

A. Multiplying Two Binomials

1.
$$(2x+3y)(4x-y)$$

= $8x^2+10xy-3y^2$



	40	-4
λ_{χ}	8x2	-2xy
3w	12xy	-3y2
~ y'		

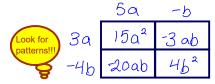
	5×	-3y
χ	5x2	-3×y
-3y	-15xy	9y2

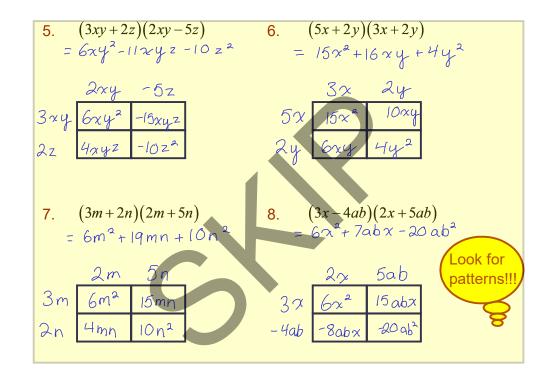
3.
$$(3x^2+2)(5x^2-1)$$

= $15x^4+7x^2-1$

3.
$$(3x^2+2)(5x^2-1)$$

 $= 15x^4+7x^2-2$
4. $(3a-4b)(5a-b)$
 $= 15a^2-23ab+4b^2$

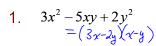




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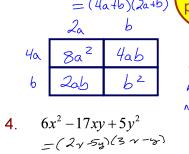
B. Factoring Complex Trinomials

**complex trinomials have a leading coefficient that is NOT ="1".



	X	-y	м 6
3,	3x2	-3xy	A -5
-2y	-2×y	2y2	N -3,-2

2.	$8a^2 + 6a$ $= (4a)$	$b + b^2$ (46)(2a+6)
		1





3.
$$10x^4 + x^2 - 3$$

= $(5x^2 + 3)(2x^2 - 1)$

$$= (5x^2+3)(2x^2-1)$$

$$2x^2 - 1$$

$$= (5x^2+3)(2x^2-1)$$
Look for patterns!!!

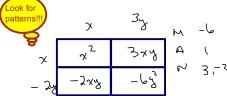
	24	-59
37	6x2	- 15 zy
- y	-2xy	5y 2

5.
$$6x^2 - xy - y^2$$
$$= (3x - y \times 2x - y)$$

6.
$$12m^2 - 16mn - 3n^2$$
= $(2m-3n) (6m+n)$

	2m	- 3n	. m	-36
6 m	12~~	-18mn	Þ	طا _
~	Zmn	-3n2	2	-1812

7.
$$x^2 + xy - 6y^2$$
$$= (x - 2x)(-x + 2x)$$



8.
$$6x^{2}y^{2} - xyz - 2z^{2}$$

$$= (24x^{3}) \times 34x^{3} - 3x^{3}$$

$$3xy -23$$
 m -12
 $2xy 6x^2y^2 - 4xy^3$ A -1
 $3xy^3 -23^2$ N -413

9.
$$2-11x+12x^2$$

	4~	- \		
	, , ,		m	24
3~	12x2	-3x	A	- 1/
_2	-87	2	7	-3,-8

10.
$$3x^2 + 2xy - 8y^2$$

= $(3x^{-4})^{(x+2y)}$

