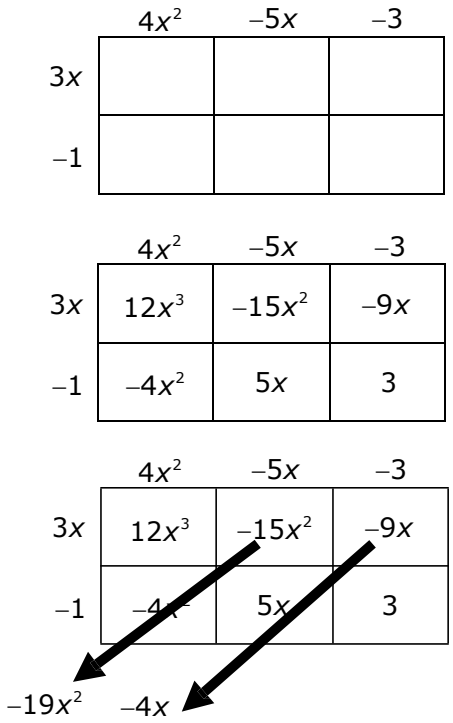
Name: _____ Date: _____

Millie's Multiplication

Millie used the strategy shown to multiply $(3x-1)(4x^2-5x-3)$.



$$12x^3-19x^2-4x+3$$

What was her strategy? Complete the four problems below using her strategy.

1	$(5a-1)(-2a^2+4a-3)$	**3**	$(x-8)(7x+4)$
2	$(3y+7)(2y+7)$	**4**	$-3b(b^2-4b+6)$

What patterns did you notice?

Name: _____ Date: _____

Fred's Factoring

Fred used the strategy shown to factor $27x^2 + 42x - 5$.

$27x^2$	
	-5

	$3x$	-5
$9x$	$27x^2$	$-45x$
1	$3x$	-5

$-42x$

wrong sign

	$3x$	5
$9x$	$27x^2$	$45x$
-1	$-3x$	-5

$42x$

$(9x - 1)(3x + 5)$

What was his strategy? Complete the four problems below using his strategy.

1	$6x^2 - 19x + 15$	**3**	$2x^2 - 11x + 5$
2	$3x^2 - 11x - 4$	**4**	$-10x^2 + 11x + 6$

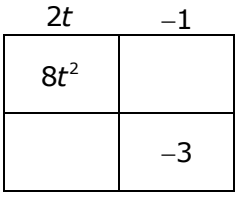
What patterns did you notice?

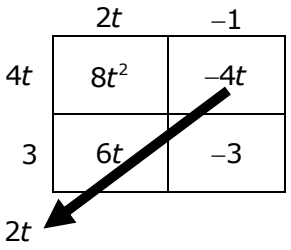
High School Fluency Activity – A(10)(E) The student is expected to factor, if possible, trinomials with real factors in the form $ax^2 + bx + c$, including perfect square trinomials of degree two.

Name:_____ Date:_____

Darian's Division

Below is Darian's work from his class today for the problem $\frac{8t^2+2t-3}{2t-1}$.





$$(2t-1)(4t+3)$$

$$\frac{8t^2+2t-3}{2t-1} = \frac{\cancel{(2t-1)}(4t+3)}{\cancel{2t-1}} = 4t+3$$

What was his strategy? Complete the four problems below using his strategy.

1	$(3x^2-12x-15)\div(x-5)$	**3**	$\frac{6y^2+11y-10}{3y-2}$
2	$\frac{x^2-x-20}{x+4}$	**4**	$(2w^2+5w-12)\div(w+4)$

What patterns did you notice?

High School Fluency Activity – A(10)(C) The student is expected to factor, if possible, trinomials with real factors in the form ax^2+bx+c, including perfect square trinomials of degree two.

