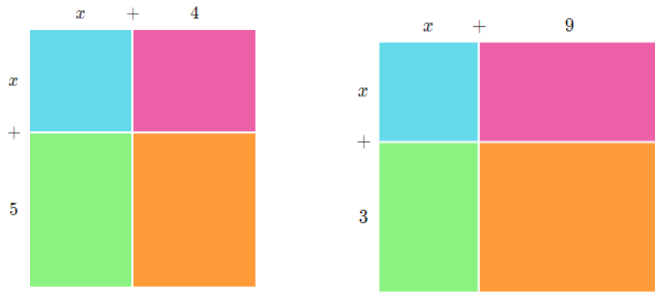|	
Student Name: Teacher Name: Class Name/Subject: Algebra 1 Period: Assignment Week #: 1	**Complete all work on a separate sheet of paper. Show all work. Include the heading provided on each worksheet you turn in.**

Monday

1. Use the box method (area model) to multiply and represent the area of each rectangle.

2. Multiply each of the binomials. Write your answer in standard form.

    a) (x-1)(x+4)

    b) (x+5)(x+3)

    c) (x-3)(x-4)

    d) (x+3)(x-5)

Tuesday

1. Multiply each of the binomials. Write your answer in standard form.

    a) (x+3)(x−3)

    b) (x+5)(x−5)

    c) (x+8)(x−8)

    d) (4+x)(4−x)

2. Multiply each of the binomials. Write your answer in standard form.

    a) $(7 + x)(7 − x)$

    b) $(2 + x)(2 − x)$

    c) $(2x + 5)(2x − 5)$

    d) $(3x + 7)(3x − 7)$

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3. Multiply each of the binomials. Write your answer in standard form.

    a) (3b-4)(b+2)

    b) (6f-7)(8f-9)

    c) (-8k+1)(-8k+1)

    d) (9+m)(-m+9)

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3. Multiply each of the binomials. Write your answer in standard form.

    a) $(5x + 1)(5x - 1)$

    b) $(3 + 4x)(3 - 4x)$

    c) $(2 + 7x)(2 - 7x)$

    d) $(1 + 6x)(1 - 6x)$

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Student Name:
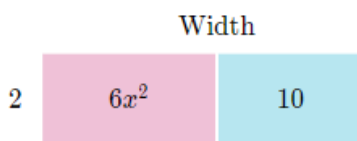Teacher Name:
Class Name/Subject: **Algebra 1**
Period:
Assignment Week #: **1**

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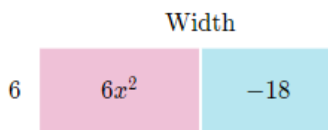
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Wednesday | ## Thursday

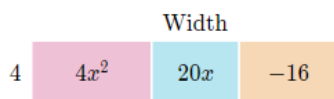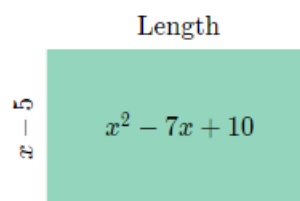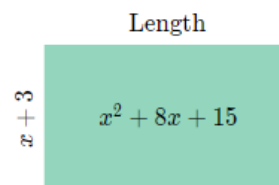| Wednesday	Thursday
1.) Karen was trying to factor $6x^2 + 10$. She found that the greatest common factor of these terms was 2 and made an area model: Width 2 | $6x^2$ | 10 **What is the width of Karen's area model?**	1.) The rectangle below has an area of $x^2 - 7x + 10$ square meters and a width of $x - 5$ meters. Length $x - 5$ | $x^2 - 7x + 10$ Find the length.
2.) Olivia was trying to factor $6x^2 - 18$. She found that the greatest common factor of these terms was 6 and made an area model: Width 6 | $6x^2$ | -18 **What is the width of Olivia's area model?**	2.) The rectangle below has an area of $x^2 + 8x + 15$ square meters and a width of $x + 3$ meters. Find the length Length $x + 3$ | $x^2 + 8x + 15$
3.) Avery was trying to factor $4x^2 + 20x - 16$. He found that the greatest common factor of these terms was 4 and made an area model: Width 4 | $4x^2$ | $20x$ | -16 **What is the width of Avery's area model?**	3.) The rectangle below has an area of $x^2 - 4x - 12$ square meters and a length of $x + 2$ meters. Find the width. $x + 2$ Width | $x^2 - 4x - 12$
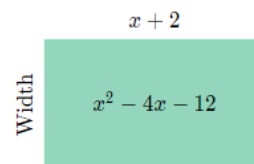
4.) Factor the greatest common factor. Write your answer in standard form.
    a) $2x^2 + 8x$
    b) $10x^2y - 15xy^2$
    c) $6x + 3$
	4.) Factor as the product of two binomials.
	    a) $x^2 - 3x + 2$
	    b) $x^2 - 9x + 20$
	    c) $x^2 - 10x + 21$

5.) Factor the greatest common factor. Write your answer in standard form.
    a) $36x^4 - 42x^2$
    b) $2x^2 - 8$
    c) $25 + 5x^2$
	5.) Factor as the product of two binomials.
	    a) $x^2 + 10x + 24$
	    b) $x^2 + 11x + 18$
	    c) $x^2 + 3x + 2$

6.) Factor the greatest common factor. Write your answer in standard form.
    a) $12x^2 - 9x + 15$
    b) $10x^2 + 35x$
    c) $4x + 10$
	6.) Factor as the product of two binomials.
	    a) $x^2 - 3x - 10$
	    b) $x^2 + 3x - 4$
	    c) $x^2 - x - 42$