Name _____ Date _____

Learning Target: I will factor linear expressions

Session 1: Guided Practice (We Do)

Materials:

- Algebra Tiles (1 set from p. 13 and p. 14: 20 +1-tiles, 20 -1-tiles, 16 +x-tiles and 16 +x-tiles per student)
- Multiplication/Factor Mat (1 per student)

We Do Together: (Teacher Actions)

- Say, build and factor each linear expression to find both products.

Problem type A: When the **coefficient** is a factor of the **constant,** such as **2**x + **8.**

1. $4x + 12$	**2.** $3x + 15$

Problem type B: When the **coefficient** is **not** a factor of the **constant,** such as **8**x + **12.**

3. $6x - 9$	**4.** $-4x + 10$

Name _____ Date _____

Learning Target: I will factor linear expressions

Session 1: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

- Students take turns leading to factor each linear expression.

5. $3x + 12$	**6.** $4x + 12$
7. $10x + 15$	**8.** $10x - 15$
9. $-3x + 6$	**10.** $-6x - 12$

Quick Check - Form A

Name_____ Date_____

Learning Target: I will factor linear expressions.

Directions: Write the equivalent factored expression. (Work time: 5 minutes)

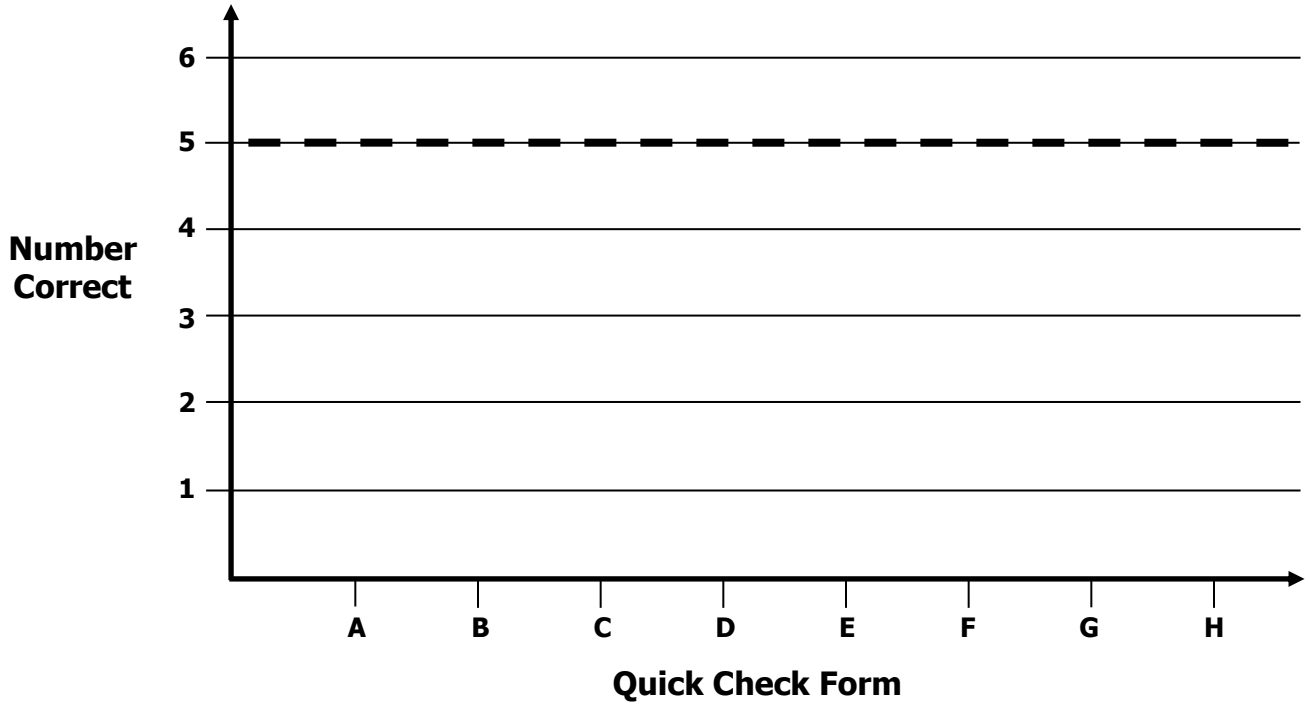
1. $8x + 24$	**2.** $27x - 9$
3. $10x - 45$	**4.** $5x - 20$
5. $24x + 4$	**6.** $9x + 12$

Growth Chart

Name_____ Date_____

Learning Target: I will factor linear expressions.

Goal: 5 out of 6 correct



Intervention	Date	Score
Guided Review		

Name _____ Date _____

Learning Target: I will factor linear expressions

Session 2: Guided Practice (We Do)

Materials:

- Algebra Tiles (1 set from p. 13 and p. 14: 20 +1-tiles, 20 -1-tiles, 16 +x-tiles and 16 +x-tiles per student)
- Multiplication/Factor Mat (1 per student)

We Do Together: (Teacher Actions)

- Say, build and factor each linear expression to find both products.

Problem type A: When the **coefficient** is a factor of the **constant,** such as **2**x + **8.**

1. $4x + 8$	**2.** $3x + 12$

Problem type B: When the **coefficient** is **not** a factor of the **constant,** such as **8**x + **12.**

3. $6x - 15$	**4.** $-4x + 14$

Name _____ Date _____

Learning Target: I will factor linear expressions

Session 2: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

- Students take turns leading to factor each linear expression.

5. $2x + 12$	**6.** $3x + 15$
7. $8x + 12$	**8.** $8x - 12$
9. $-4x + 8$	**10.** $-5x - 10$

Quick Check - Form B

Name_____ Date_____

Learning Target: I will factor linear expressions.

Directions: Write the equivalent factored expression. (Work time: 5 minutes)

1. $7x + 56$	**2.** $30x + 6$
3. $8x - 20$	**4.** $3x - 12$
5. $36x + 4$	**6.** $12x - 42$

Name _____ Date _____

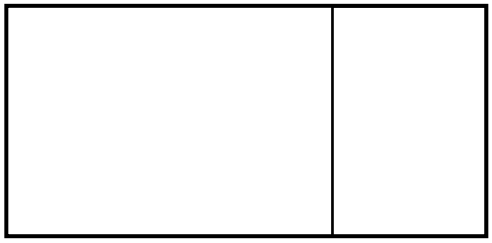
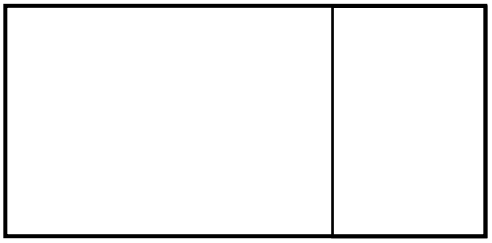
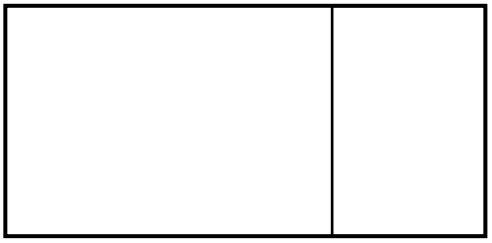
Learning Target: I will factor linear expressions

Session 3: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Say, draw and factor each linear expression using a math drawing.

Note: *The width is the greatest common factor of the coefficient and the constant.*

1. $4x + 12$ 	**2.** $3x + 15$ 
3. $6x - 15$ 	**4.** $12x - 8$ 

Name _____ Date _____

Learning Target: I will factor linear expressions

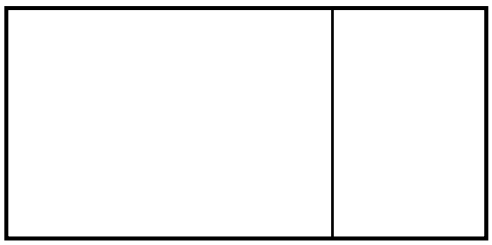
Session 3: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

- Students take turns leading to factor each linear expression using a math drawing.

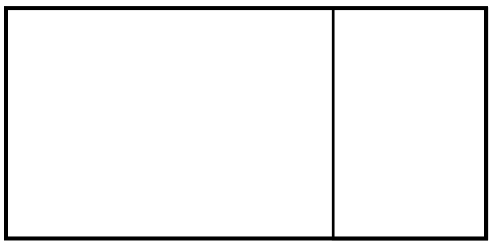
5.

$3x + 12$



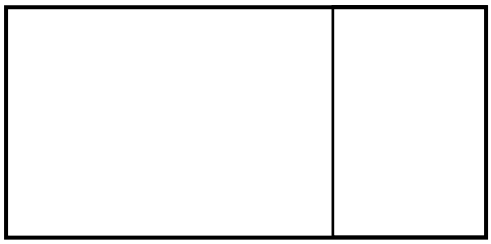
6.

$5x + 20$



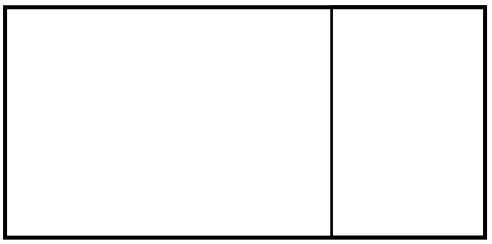
7.

$9x - 15$



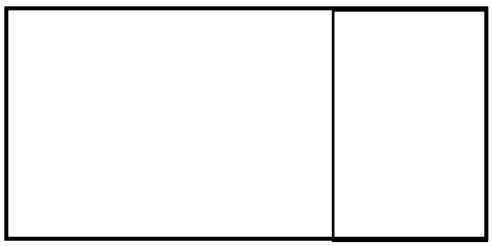
8.

$10x - 6$



9.

$6x + 3$



10.

$4x - 24$

Name _____ Date _____

Learning Target: I will factor linear expressions

Session 3: Guided Practice (We Do – Teacher Notes)

We Do Together: (Teacher Actions)

- Say, draw and factor each linear expression using a math drawing.

Note: *The width is the greatest common factor of the coefficient and the constant.*

1. $4x + 12 = 4(x + 3)$

4	x	+	3
	$4 \cdot x$ $4x$		$4 \cdot 3$ 12

2. $3x + 15 = 3(x + 5)$

3	x	+	5
	$3 \cdot x$ $3x$		$3 \cdot 5$ 15

3. $6x + -15 = 3(2x + -5)$

$6x - 15$

3	$2x$	+	-5
	$3 \cdot 2x$ $6x$		$3 \cdot -5$ -15

4. $12x + -8 = 4(2x + -3)$

$12x - 8$

4	$3x$	+	-2
	$4 \cdot 3x$ $12x$		$4 \cdot -2$ -8

- *Re-write the linear expression using the "add the opposite to subtract" strategy*
- ***The width is the greatest common factor of the coefficient and the constant***
- *Find the length by creating equal groups*

Quick Check - Form C

Name_____ Date_____

Learning Target: I will factor linear expressions.

Directions: Write the equivalent factored expression. (Work time: 5 minutes)

1. $6x + 42$	**2.** $18x - 3$
3. $21x - 35$	**4.** $4x + 24$
5. $56x + 7$	**6.** $12x - 27$

Name _____ Date _____

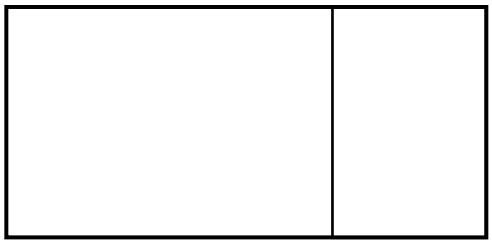
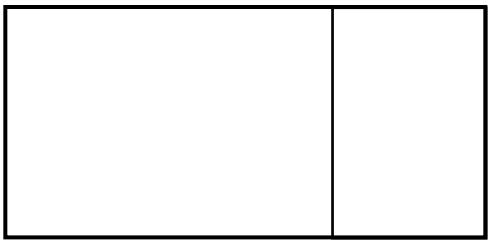
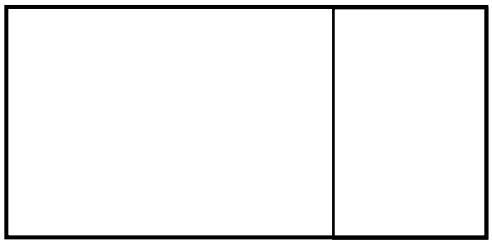
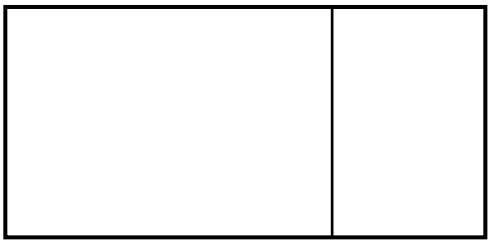
Learning Target: I will factor linear expressions

Session 4: Guided Practice (We Do)

Note: *The width is the greatest common factor of the coefficient and the constant.*

We Do Together: (Teacher Actions)

- Say, draw and factor each linear expression using a math drawing.

1. $4x + 20$ 	**2.** $3x + 21$ 
3. $6x - 27$ 	**4.** $15x - 6$ 

Name _____ Date _____

Learning Target: I will factor linear expressions

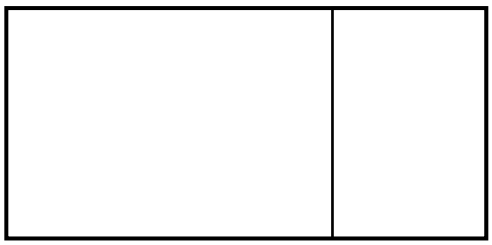
Session 4: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

- Students take turns leading to factor each linear expression using a math drawing.

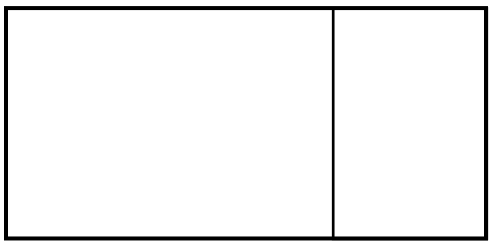
5.

$3x + 15$



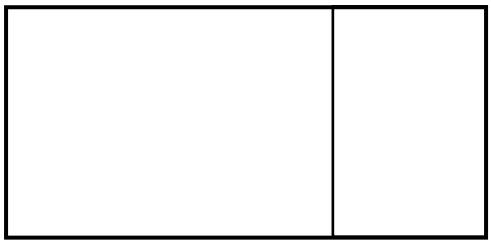
6.

$5x + 30$



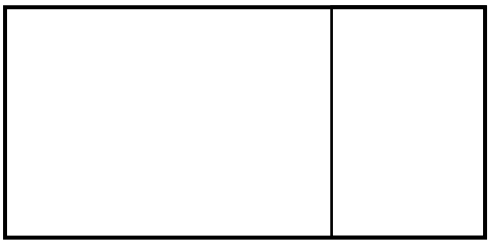
7.

$9x - 21$



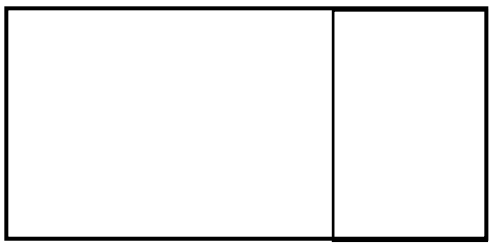
8.

$20x - 6$



9.

$12x + 3$



10.

$4x - 28$

Quick Check - Form D

Name_____ Date_____

Learning Target: I will d factor linear expressions.

Directions: Write the equivalent factored expression. (Work time: 5 minutes)

1. $9x + 36$	**2.** $32x - 8$
3. $12x - 42$	**4.** $7x + 35$
5. $24x - 6$	**6.** $8x + 20$

Name _____ Date _____

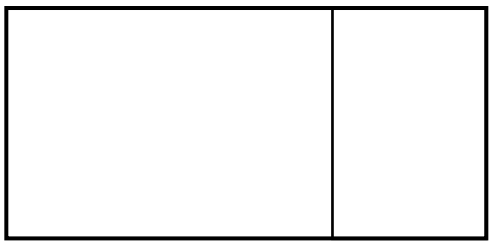
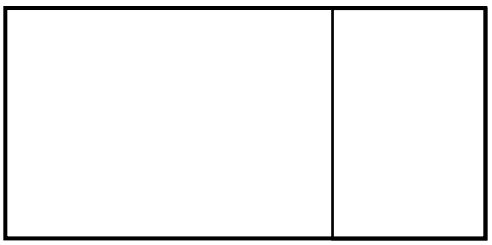
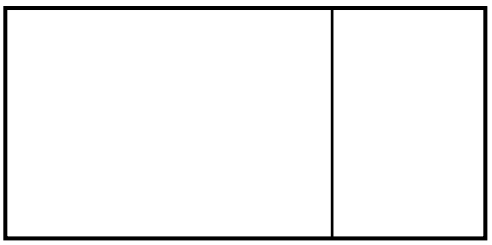
Learning Target: I will factor linear expressions

Session 5: Guided Practice (We Do)

Note: *The width is the greatest common factor of the coefficient and the constant.*

We Do Together: (Teacher Actions)

- Say, draw and factor each linear expression using a math drawing.

1. $3x + 12$ 	**2.** $5x + 15$ 
3. $4x - 18$ 	**4.** $20x - 8$ 

Name _____ Date _____

Learning Target: I will factor linear expressions

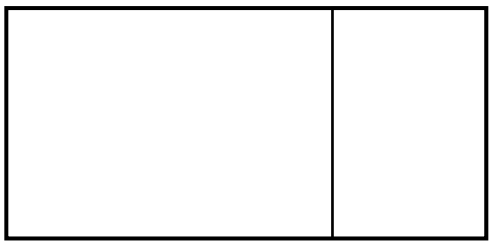
Session 5: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

- Students take turns leading to factor each linear expression using a math drawing.

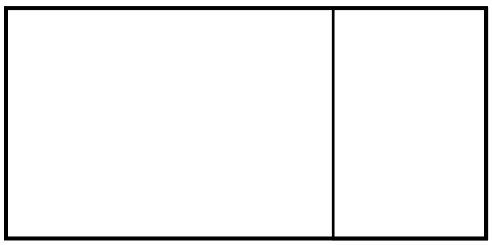
5.

$4x + 12$



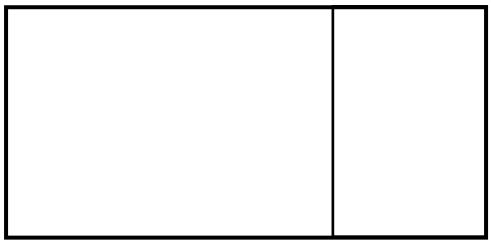
6.

$2x + 20$



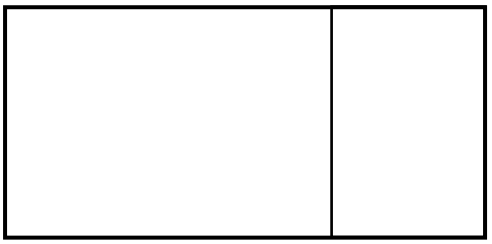
7.

$12x - 15$



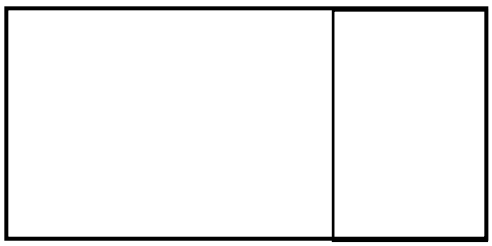
8.

$10x - 8$



9.

$6x + 2$



10.

$8x - 24$

Quick Check - Form E

Name_____ Date_____

Learning Target: I will factor linear expressions.

Directions: Write the equivalent factored expression. (Work time: 5 minutes)

1. $8x + 24$	**2.** $27x - 9$
3. $10x - 45$	**4.** $5x - 20$
6. $24x + 4$	**6.** $9x + 12$

Name _____ Date _____

Learning Target: I will factor linear expressions

Session 6: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Factor each linear expression.

1. $15x + 5$	**2.** $14x - 7$
3. $8x - 12$	**4.** $15x - 9$

Name _____ Date _____

Learning Target: I will factor linear expressions

Session 6: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

- Students take turns leading to factor each linear expression.

5. $15x + 12$	**6.** $8x - 12$
7. $20x - 8$	**8.** $18x + 6$
9. $28x - 12$	**10.** $16x - 24$

Quick Check - Form F

Name_____ Date_____

Learning Target: I will factor linear expressions.

Directions: Write the equivalent factored expression. (Work time: 5 minutes)

1. $7x + 56$	**2.** $30x + 6$
3. $8x - 20$	**4.** $3x - 12$
6. $36x + 4$	**6.** $12x - 42$

Name _____ Date _____

Learning Target: I will factor linear expressions

Session 7: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Factor each linear expression.

1. $20x + 5$	**2.** $21x - 7$
3. $8x - 20$	**4.** $21x - 6$

Name _____ Date _____

Learning Target: I will factor linear expressions

Session 7: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

- Students take turns leading to factor each linear expression.

5. $18x + 12$	**6.** $6x - 15$
7. $28x - 8$	**8.** $24x + 6$
9. $30x - 12$	**10.** $12x - 18$

Quick Check - Form G

Name_____ Date_____

Learning Target: I will factor linear expressions.

Directions: Write the equivalent factored expression. (Work time: 5 minutes)

1. $6x + 42$	**2.** $18x - 3$
3. $21x - 35$	**4.** $4x + 24$
6. $56x + 7$	**6.** $12x - 27$

Name _____ Date _____

Learning Target: I will factor linear expressions

Session 8: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Factor each linear expression.

1. $35x + 5$	**2.** $21x - 7$
3. $8x - 20$	**4.** $24x - 9$

Name _____ Date _____

Learning Target: I will factor linear expressions

Session 8: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

- Students take turns leading to factor each linear expression.

5. $18x + 12$	**6.** $8x - 20$
7. $28x - 8$	**8.** $30x + 6$
9. $16x - 12$	**10.** $32x - 24$

Quick Check - Form H

Name_____ Date_____

Learning Target: I will d factor linear expressions.

Directions: Write the equivalent factored expression. (Work time: 5 minutes)

1. $9x + 36$	**2.** $32x - 8$
3. $12x - 42$	**4.** $7x + 35$
6. $24x - 6$	**6.** $8x + 20$