Tier 3
Intervention Lessons

7.NS.2c

Learning Target: I will multiply and divide by integers between -10 and 10

Readiness for 8.EE.7b: Solve multi-step linear equations

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Tier 3 Intervention Planning Guide

Learning Target: I will multiply and divide by integers between -10 and 10

Readiness for solving multi-step linear equations

Recommended Actions	
Beginning (5 min.)	➢ Review the learning target with the whole group ➢ Ask each student to set a goal for the day based on their previous Quick Check Score ➢ Have each student use a highlighter to plot their goal for the day
Middle (15 min.)	➢ Model solving a word problem – "I do" *(Sessions 1, 3 and 6 only)* ➢ Guided Practice – "We do" **Sessions 1 and 2:** Multiply and divide using integer tiles **Sessions 3, 4 and 5:** Multiply and divide using integer drawings **Sessions 6, 7 and 8:** Multiply and divide using understanding of multiplication and division
End (10 min.)	➢ Bring the students back together ➢ Ask students to reflect on their progress towards the learning target o What did I learn today about multiplying and dividing by integers between -10 and 10? o How confident do you feel about multiplying and dividing by integers between -10 and 10 on my own? (Thumbs up, down, or sideways) ➢ Assess each student's progress using the next **Quick Check** form ➢ Guide students to self-correct their **Quick Check** ➢ Guide students to chart their progress in their **Growth Chart** o If not using Delta Math lessons, record the activity in the table ➢ Collect each student's **Quick Check** and **Growth Chart**
After Session 6	➢ Differentiation Options: o Allow students who met the learning goal to work independently while others do the guided practice during the next session o Exit students who met the learning goal for a third time ➢ Problem solve with a team to plan additional support for students who do not meet the learning goal within 8 sessions

Session 1: Modeling (I Do)

Learning Target: I will multiply and divide by integers between -10 and 10

Readiness for solving multi-step linear equations

Sam's grandma keeps track of money that she loans him in a notebook called "Sam's Financial Journal". The recent balance was 0 dollars and his grandma gave him money to purchase three $2 hotdogs. What is the current balance in the journal?

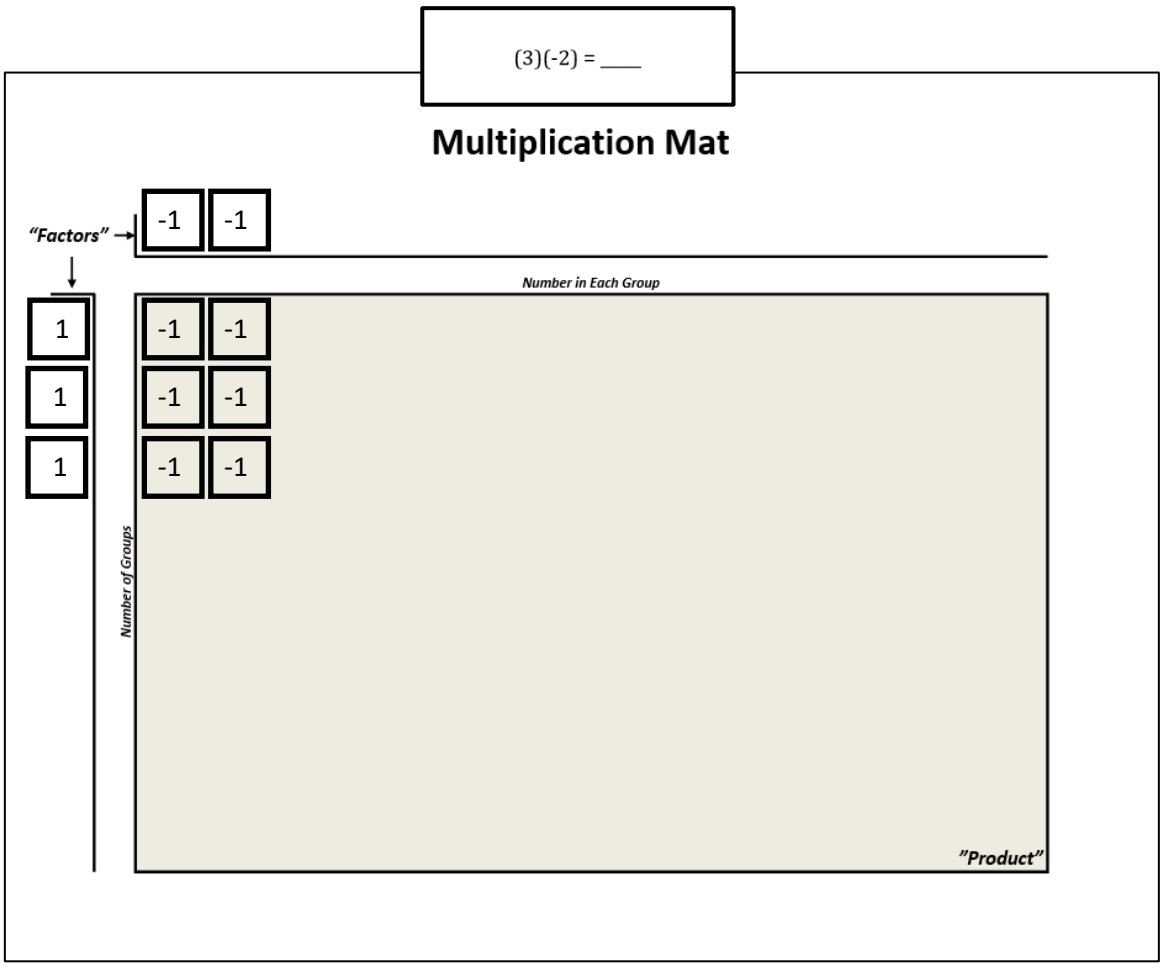
Session 1: Modeling *(I Do – Visual Support)*

Learning Target: I will multiply and divide by integers between -10 and 10

Readiness for solving multi-step linear equations

Sam's grandma keeps track of money that she loans him in a notebook called "Sam's Financial Journal". The recent balance was 0 dollars and his grandma gave him money to purchase three $2 hotdogs. What is the current balance in the journal?

"3 groups of -2"



Session 1: Modeling *(I Do - Teacher Notes)*

Learning Target: I will multiply and divide by integers between -10 and 10

Readiness for solving multi-step linear equations

> Sam's grandma keeps track of money that she loans him in a notebook called "Sam's Financial Journal". The recent balance was 0 dollars and his grandma gave him money to purchase three $2 hotdogs. What is the current balance in the journal?

I am going to think aloud to model solving this problem.

Your job is to watch, listen, think and ask questions.

First, it is important to know what the problem is about.

The problem is about "Sam's Financial Journal".

Second, I need to determine what I need to find.

I need to find the current balance.

Third, I need to determine what I know.

I know the recent balance was 0 dollars and his grandma gave him money to purchase three $2 hotdogs. Also, I know money that is owed…or debt…can be represented as negative integers and money earned can be represented as positive integers.

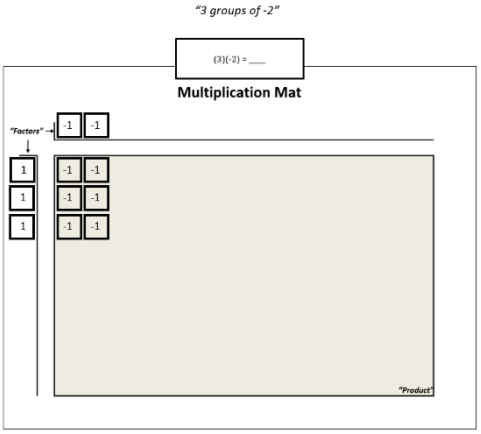
Fourth, I need to figure out what I can try.

I am going to try using integer tiles and equation cards to find Sam's current balance.

Since I need 3 groups of 2 negative chips to model Sam's current debt... I can use the equation card 3 times -2 to model this situation.
(*Place 3 "+1 tiles" and 2 "-1 tiles" as the factors to the problem and the equation card near the top of the multiplication mat.*)

Now, I will place 3 sets of 2 "-1 tiles" to show the current balance.
(Place 3 sets of 2 "-1 tiles" on the mat.)

I see 2…4…6 negative 1 tiles…that represents -6 dollars…or 6 dollars of debt to pay.
(Point to the 6 "-1 tiles" that make up the product.)



Last, I need to make sure that my answer makes sense.

I found that Sam's balance is 6 dollars of debt. It makes sense because I modeled the situation using integer tiles as the factors. Then, I modeled the product with 2 groups of 3 "-1 tiles" to show 6 dollars of debt as the current balance in the journal.

Modeling & Guided Practice Cards

Use for Problem 1 $3(-5) = \_\_\_\_$	Use for Problem 2 $-12 \div 4 = \_\_\_\_$
Use for Problem 3 $4 \times -3 = \_\_\_\_$	Use for Problem 4 $-4(3) = \_\_\_\_$
Use for Problem 5 $2(-5) = \_\_\_\_$	Use for Problem 6 $-12 \div 3 = \_\_\_\_$
Use for Problem 7 $5 \times -3 = \_\_\_\_$	Use for Problem 8 $-2 \times 3 = \_\_\_\_$
Use for Problem 9 $-10 \div 2 = \_\_\_\_$	Use for Problem 10 $-16 \div -8 = \_\_\_\_$
Use for Modelling $3(-2) = \_\_\_\_$	

Integer Tiles (3 Sets)

+1	+1	+1	+1	+1	+1	+1	+1	+1	+1
+1	+1	+1	+1	+1	+1	+1	+1	+1	+1
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
+1	+1	+1	+1	+1	+1	+1	+1	+1	+1
+1	+1	+1	+1	+1	+1	+1	+1	+1	+1
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
+1	+1	+1	+1	+1	+1	+1	+1	+1	+1
+1	+1	+1	+1	+1	+1	+1	+1	+1	+1
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1

Name _____ Date _____

Learning Target: I will multiply and divide by integers between -10 and 10

Session 1: Guided Practice (We Do)

Materials:

- Integer Tiles (20 positive and 20 negative tiles)
- Integer Equation Cards (1 set)

Note: If there is no addition or subtraction symbol between the first integer and the parentheses, then the integers should be multiplied.

$2(-4) = 2 \times -4$ $\quad -4(-5) = -4 \times -5$
$-3(7) = -3 \times 7$ $\quad (-2)(6) = -2 \times 6$

We Do Together: (Teacher Actions)

- Say what you are trying to find and use integer tiles to find the answer.

1. $3(-5) =$ ____	**2.** $-12 \div 4 =$ ____
3. $4 \times -3 =$ ____	**4.** $-4(-3) =$ ____

Name _____ Date _____

Learning Target: I will multiply and divide by integers between -10 and 10

Session 1: Guided Practice (We Do - Continued)

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

- Students take turns leading to multiply or divide using integer tiles.

5. $2(-5) = \_\_\_\_$	**6.** $-12 \div 3 = \_\_\_\_$
7. $5 \times -3 = \_\_\_\_$	**8.** $-2 \times 3 = \_\_\_\_$
9. $-10 \div 2 = \_\_\_\_$	**10.** $-16 \div -8 = \_\_\_\_$

Name _____ Date _____

Learning Target: I will multiply and divide by integers between -10 and 10

Session 1: Guided Practice (We Do – Teacher Notes)

Materials:

- Integer Tiles (20 positive and 20 negative tiles)
- Integer Equation Cards (1 set)

Note: If there is no addition or subtraction symbol between the first integer and the parentheses, then the integers should be multiplied.

$2(-4) = 2 \times -4$ $\quad -4(-5) = -4 \times -5$
$-3(7) = -3 \times 7$ $\quad (-2)(6) = -2 \times 6$

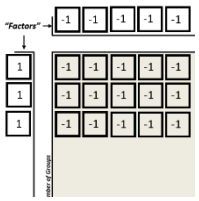
We Do Together: (Teacher Actions)

- Say what you are trying to find and use integer tiles to find the answer.

1.

"3 times negative 5 is equal to 3 groups of 5 negatives"

$3(-5) =$ -15

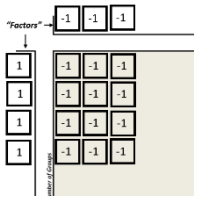


2.

"Negative 12 divided by 4 can be thought of as 4 groups of how many is negative 12?"

$-12 \div 4 =$ -3

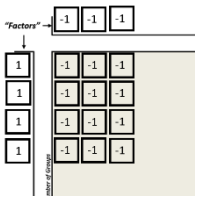
4(____) = -12



3.

"4 times negative 3 is equal to 4 groups of 3 negatives"

$4 \times -3 =$ -12



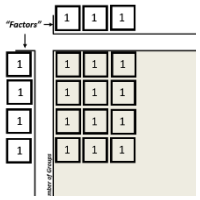
4.

$-4(-3) =$ 12

The opposite of

4(3) = 12

"Negative 4 times negative 3 is equal to the opposite of 4 groups of 3 negatives, which is equal to 4 groups of 3 positives"



Session 1: Self-Reflection

Learning Target: I will multiply and divide by integers between -10 and 10

Briefly discuss student responses

- What did I learn today about multiplying and dividing by integers between -10 and 10?

- How confident do I feel about multiplying and dividing by integers between -10 and 10? *(Thumbs up, down, or sideways)*

Quick Check - Form A

Name_____ Date_____

Learning Target: I will multiply and divide by integers between -10 and 10.

Directions: Write the answer to each problem. (Work time: 2 minutes)

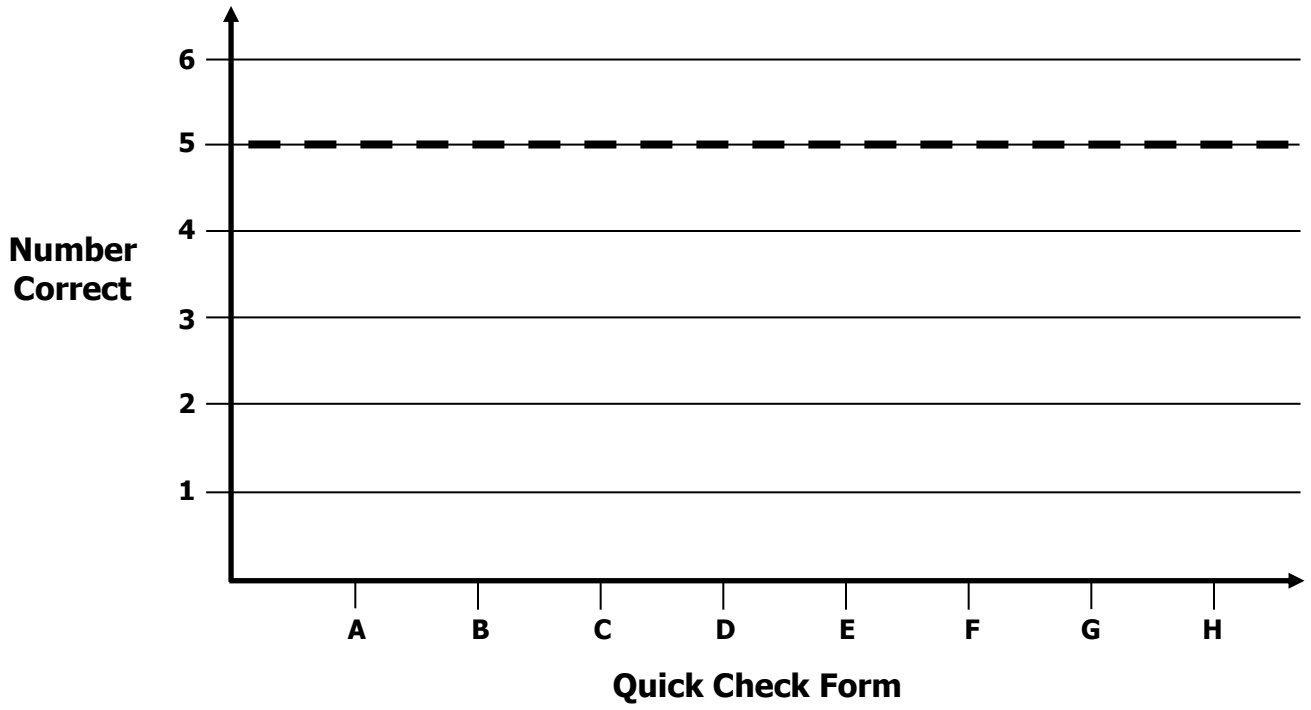
1. -10 x 4	**2.** 6 x -8
3. -9 x -8	**4.** -9 ÷ 3
5. 10 ÷ -2	**6.** -10 ÷ -2

Growth Chart

Name_____ Date_____

Learning Target: I will multiply and divide by integers between -10 and 10.

Goal: 5 out of 6 correct



Intervention	Date	Score
Session 1:		
Session 2:		
Session 3:		
Session 4:		
Session 5:		
Session 6:		
Session 7:		
Session 8:		

Name _____ Date _____

Learning Target: I will multiply and divide by integers between -10 and 10

Session 2: Guided Practice (We Do)

Materials:

- Integer Tiles (20 positive and 20 negative tiles)
- Integer Equation Cards (1 set – See Session 1)

Note: If there is no addition or subtraction symbol between the first integer and the parentheses, then the integers should be multiplied.

$2(-4) = 2 \times -4$ $\quad -4(-5) = -4 \times -5$
$-3(7) = -3 \times 7$ $\quad (-2)(6) = -2 \times 6$

We Do Together: (Teacher Actions)

- Say what you are trying to find and use integer tiles to find the answer.

1. $4(-5) =$ ____	**2.** $-12 \div 3 =$ ____
3. $5 \times -3 =$ ____	**4.** $-2(-3) =$ ____

Name _____ Date _____

Learning Target: I will multiply and divide by integers between -10 and 10

Session 2: Guided Practice (We Do - Continued)

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

- Students take turns leading to multiply or divide using integer tiles.

5. $2(-4) = \_\_\_\_$	**6.** $-15 \div 3 = \_\_\_\_$
7. $6 \times -3 = \_\_\_\_$	**8.** $-3 \times 4 = \_\_\_\_$
9. $-12 \div 2 = \_\_\_\_$	**10.** $-10 \div -2 = \_\_\_\_$

Session 2: Self-Reflection

Learning Target: I will multiply and divide by integers between -10 and 10

Briefly discuss student responses

- What did I learn today about multiplying and dividing by integers between -10 and 10?

- How confident do I feel about multiplying and dividing by integers between -10 and 10? *(Thumbs up, down, or sideways)*

Quick Check - Form B

Name_____ Date_____

Learning Target: I will multiply and divide by integers between -10 and 10.

Directions: Write the answer to each problem. (Work time: 2 minutes)

1. -7 x 3	**2.** 6 x -9
3. -5 x -6	**4.** -8 ÷ 4
5. 10 ÷ -5	**6.** -12 ÷ -4

Session 3: Modeling (I Do)

Learning Target: I will multiply and divide by integers between -10 and 10

Readiness for solving multi-step linear equations

Sam's grandma keeps track of money that she loans him in a notebook called "Sam's Financial Journal". The recent balance was 0 dollars and his grandma gave him money to purchase two $4 movies to watch at his birthday sleepover. What is the current balance in the journal?

Session 3: **Modeling** (Visual Support)

Learning Target: I will multiply and divide by integers between -10 and 10

Readiness for solving multi-step linear equations

Sam's grandma keeps track of money that she loans him in a notebook called "Sam's Financial Journal". The recent balance was 0 dollars and his grandma gave him money to purchase two $4 movies to watch at his birthday sleepover. What is the current balance in the journal?

2 x -4 = -8

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Session 3: Modeling *(I Do - Teacher Notes)*

Learning Target: I will multiply and divide by integers between -10 and 10

Readiness for solving multi-step linear equations

> Sam's grandma keeps track of money that she loans him in a notebook called "Sam's Financial Journal". The recent balance was 0 dollars and his grandma gave him money to purchase two $4 movies to watch at his birthday sleepover. What is the current balance in the journal?

I am going to think aloud to model solving this problem.

Your job is to watch, listen, think and ask questions.

First, it is important to know what the problem is about.

The problem is about "Sam's Financial Journal".

Second, I need to determine what I need to find.

I need to find the current balance.

Third, I need to determine what I know.

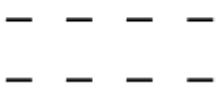
I know the recent balance was 0 dollars and his grandma gave him money to purchase two $4 movies. Also, I know money that is owed…or debt…can be represented as negative integers and money earned can be represented as positive integers.

Fourth, I need to figure out what I can try.

I am going to try using a math drawing to find Sam's current balance.

$$2 \times -4 = -8$$

Since I need 2 groups of 4 negative tiles to model Sam's current debt... I will write and model the equation 2 times -4.
(*Write "2 x -4".*)



Here is one group of -4 dollars.
(Draw one row of 4 negative signs.)

And here is the second group of -4 dollars.
(Draw the second row of 4 negative signs below the first row.)

I see 4…8 negative signs…that represents -8 dollars…or 8 dollars of debt to pay
(Point to the 8 negative signs that make up the product.)

Last, I need to make sure that my answer makes sense.

I found that Sam's balance is 8 dollars of debt. It makes sense because I modeled the situation using a multiplication equation and drawing. Then, I modeled the product with 2 groups of 4 negative signs to show 8 dollars of debt as the current balance in the journal.

Name _____ Date _____

Learning Target: I will multiply and divide by integers between -10 and 10

Session 3: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Say what you are trying to find and use a math drawing to find the answer.

1. $3(-5) = \_\_\_\_$	**2.** $-12 \div 4 = \_\_\_\_$
3. $4 \times -3 = \_\_\_\_$	**4.** $-4(-3) = \_\_\_\_$
5. $-15 \div 3 = \_\_\_\_$	**6.** $-5(4) = \_\_\_\_$

Name _____ Date _____

Learning Target: I will multiply and divide by integers between -10 and 10

Session 3: Guided Practice (We Do - Continued)

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

- Students take turns leading to add and subtract integers using drawings to represent action.

7. $2(-4) = \_\_\_\_$	**8.** $-8 \div 2 = \_\_\_\_$
9. $6 \times -3 = \_\_\_\_$	**10.** $-3(5) = \_\_\_\_$
11. $-12 \div 6 = \_\_\_\_$	**12.** $-2(-7) = \_\_\_\_$

Name _____ Date _____

Learning Target: I will multiply and divide by integers between -10 and 10

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

We Do Together: (Teacher Actions)

- Say what you are trying to find and use a math drawing to find the answer.

1.

"3 times negative 5 is equal to 3 groups of 5 negatives"

$3(-5) =$ -15

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2.

"Negative 12 divided by 4 can be thought of as 4 groups of how many is negative 12?"

$-12 \div 4 =$ -3

4(____) = -12

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3.

"4 times negative 3 is equal to 4 groups of 3 negatives"

$4 \times -3 =$ -12

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4.

"Negative 4 times negative 3 is equal to the opposite of 4 groups of 3 negatives which is equal to 4 groups of 3 positives"

$-4(-3) =$ 12

The opposite of

4(3) = ____

+ + +

+ + +

+ + +

+ + +

5.

"Negative 15 divided by 3 can be thought of as 3 groups of how many is negative 15?"

$-15 \div 3 =$ -5

3(_____) = -15?

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6.

The opposite of

$-5(4) =$ -20

5(-4) = ____

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– – – –

"Negative 5 times 4 is equal to the opposite of 5 groups of 4 positives, which is equal to 5 groups of 4 negatives"

Session 3: Self-Reflection

Learning Target: I will multiply and divide by integers between -10 and 10

Briefly discuss student responses

- What did I learn today about multiplying and dividing by integers between -10 and 10?

- How confident do I feel about multiplying and dividing by integers between -10 and 10? *(Thumbs up, down, or sideways)*

Quick Check - Form C

Name_____ Date_____

Learning Target: I will multiply and divide by integers between -10 and 10.

Directions: Write the answer to each problem. (Work time: 2 minutes)

1. -9 x 2	**2.** 5 x -9
3. -4 x -8	**4.** -6 ÷ 3
5. 18 ÷ -2	**6.** -24 ÷ -8

Name _____ Date _____

Learning Target: I will multiply and divide by integers between -10 and 10

Session 4: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Say what you are trying to find and use a math drawing to find the answer.

1. $3(-4) = \_\_\_\_$	**2.** $-8 \div 4 = \_\_\_\_$
3. $4 \times -5 = \_\_\_\_$	**4.** $-2(-3) = \_\_\_\_$
5. $-18 \div 3 = \_\_\_\_$	**6.** $-5(2) = \_\_\_\_$

Name _____ Date _____

Learning Target: I will multiply and divide by integers between -10 and 10

Session 4: Guided Practice (We Do - Continued)

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

- Students take turns leading to add and subtract integers using drawings to represent action.

7. $2(-6) = \_\_\_\_$	**8.** $-10 \div 2 = \_\_\_\_$
9. $7 \times -3 = \_\_\_\_$	**10.** $-3(4) = \_\_\_\_$
11. $-18 \div 6 = \_\_\_\_$	**12.** $-2(-9) = \_\_\_\_$

Session 4: Self-Reflection

Learning Target: I will multiply and divide by integers between -10 and 10

Briefly discuss student responses

- What did I learn today about multiplying and dividing by integers between -10 and 10?

- How confident do I feel about multiplying and dividing by integers between -10 and 10? *(Thumbs up, down, or sideways)*

Quick Check - Form D

Name_____ Date_____

Learning Target: I will multiply and divide by integers between -10 and 10.

Directions: Write the answer to each problem. (Work time: 2 minutes)

1. -5 x 10	**2.** 4 x -7
3. -3 x -7	**4.** -8 ÷ 2
5. 4 ÷ -2	**6.** -20 ÷ -5

Name _____ Date _____

Learning Target: I will multiply and divide by integers between -10 and 10

Session 5: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Say what you are trying to find and use a math drawing to find the answer.

1. $3(-6) = \_\_\_\_$	**2.** $-12 \div 2 = \_\_\_\_$
3. $4 \times -2 = \_\_\_\_$	**4.** $-4(-5) = \_\_\_\_$
5. $-15 \div 5 = \_\_\_\_$	**6.** $-5(3) = \_\_\_\_$

Name _____ Date _____

Learning Target: I will multiply and divide by integers between -10 and 10

Session 5: Guided Practice (We Do - Continued)

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

- Students take turns leading to add and subtract integers using drawings to represent action.

7. $2(-7) = \_\_\_\_$	**8.** $-12 \div 2 = \_\_\_\_$
9. $2 \times -3 = \_\_\_\_$	**10.** $-3(7) = \_\_\_\_$
11. $-12 \div 4 = \_\_\_\_$	**12.** $-2(-8) = \_\_\_\_$

Session 5: Self-Reflection

Learning Target: I will multiply and divide by integers between -10 and 10

Briefly discuss student responses

- What did I learn today about multiplying and dividing by integers between -10 and 10?

- How confident do I feel about multiplying and dividing by integers between -10 and 10? *(Thumbs up, down, or sideways)*

Quick Check - Form E

Name_____ Date_____

Learning Target: I will multiply and divide by integers between -10 and 10.

Directions: Write the answer to each problem. (Work time: 2 minutes)

1. -10 x 4	**2.** 6 x -8
3. -9 x -8	**4.** -9 ÷ 3
5. 10 ÷ -2	**6.** -10 ÷ -2

Session 6: Modeling

Learning Target: I will multiply and divide by integers between -10 and 10

Readiness for solving multi-step linear equations

On the Delta Math readiness screener, Sam selected the following answer choice. Is he correct? If not, why do you think he chose his answer?

Multiply:

$$-3(-5)$$

○ 15 ○ -15 ○ 8 ● -8

Session 6: **Modeling** (Visual Support)

Learning Target: I will multiply and divide by integers between -10 and 10

Readiness for solving multi-step linear equations

On the Delta Math readiness screener, Sam selected the following answer choice. Is he correct? If not, why do you think he chose his answer?

Multiply:

$-3(-5)$ = *15*

Opposite of 3(-5) = 3(5) = 15

○ 15 ○ -15 ○ 8 ● -8

Session 6: Modeling *(I Do - Teacher Notes)*

Learning Target: I will multiply and divide by integers between -10 and 10

Readiness for solving multi-step linear equations

> On the Delta Math readiness screener, Sam selected the following answer choice. Is he correct? If not, why do you think he chose his answer?

I am going to think aloud to model solving this problem.

Your job is to watch, listen, think and ask questions.

First, it is important to know what the problem is about.

This problem is about Sam answering an integer multiplication problem on a Delta Math readiness screener.

Second, I need to determine what I need to find.

I need to find if Sam chose the correct answer. And if he was not correct, I need to consider why he made the choice that he did.

Third, I need to determine what I know.

I know that Sam chose -8 as the answer to -3 times -5 and I know that the negative sign in front of the 3 means "the opposite of".
(Draw an arrow pointing to the first negative sign and write "Opposite of 3(-5)")

Fourth, I need to figure out what I can try.

I am going to try using my understanding of multiplication to find the correct answer to this question.

Multiply:

-3(-5) = 15

Opposite of 3(-5) = 3(5) = 15

Since I need to find the opposite of 3 groups of negative 5…
I can think of 3 groups of positive 5…which is equal to 15 positives.
(Write "= 3(5) = 15 and circle the answer choice "15".)

○ 15 ○ -15 ○ 8 ● -8

I see this is not the answer choice that Sam chose…therefore, he must have selected an incorrect answer choice.

I think that Sam chose his answer because he saw the two negative signs and thought 3 negatives and 5 negatives make 8 negatives…which is true if the operation was addition. But, since there is no addition symbol between the first integer and the parentheses, the operation is multiplication.

Last, I need to make sure that my answer makes sense.

I found that Sam was not correct. It makes sense because I thought about the problem as "the opposite of 3 groups of -5" to find the correct answer...15.

Name _____ Date _____

Learning Target: I will multiply and divide by integers between -10 and 10

Session 6: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Say what you are trying to find and use your understanding of integers to find the answer. Then, write three additional equations using the three integers.

1. $8(-5) = \_\_\_\_$	**2.** $-32 \div 4 = \_\_\_\_$
3. $9 \times -3 = \_\_\_\_$	**4.** $-6(7) = \_\_\_\_$
5. $-35 \div 7 = \_\_\_\_$	**6.** $-7(-8) = \_\_\_\_$
7. $6 \times -8 = \_\_\_\_$	**8.** $-54 \div 9 = \_\_\_\_$
9. $-63 \div 7 = \_\_\_\_$	**10.** $-8(9) = \_\_\_\_$

Name _____ Date _____

Learning Target: I will multiply and divide by integers between -10 and 10

Session 6: Guided Practice (We Do - Continued)

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

- Students take turns leading to multiply and divide integers.

11. $8(-4) = \_\_\_\_$	**12.** $-42 \div 6 = \_\_\_\_$
13. $9 \times -7 = \_\_\_\_$	**14.** $-6(8) = \_\_\_\_$
15. $-56 \div 7 = \_\_\_\_$	**16.** $-3(-8) = \_\_\_\_$
17. $9 \times -6 = \_\_\_\_$	**18.** $-64 \div 8 = \_\_\_\_$
19. $-54 \div 6 = \_\_\_\_$	**20.** $-4(9) = \_\_\_\_$

Name _____ Date _____

Learning Target: I will multiply and divide by integers between -10 and 10

Session 6: Guided Practice (We Do – Teacher Notes)

We Do Together: (Teacher Actions)

- Say what you are trying to find and use your understanding of integers to find the answer. Then, write three additional equations using the three integers.

1. *"8 times negative 5 is equal to 8 groups of 5 negatives"* $8(-5) = \underline{-40}$	**2.** *"Negative 32 divided by 4 can be thought of as 4 groups of how many is negative 32?"* $-32 \div 4 = \underline{-8}$ $4(\_\_\_) = -32$
3. *"9 times negative 3 is equal to 9 groups of 3 negatives"* $9 \times -3 = \underline{-27}$	**4.** $-6(7) = \underline{-42}$ $6(-7) = \_\_\_$ *"Negative 6 times 7 is equal to the opposite of 6 groups of 7, which is equal to 6 groups of negative 7"*
5. *"Negative 35 divided by 7 can be thought of as 7 groups of how many is negative 35?"* $-35 \div 7 = \underline{-5}$ $7(\_\_\_) = -35$	**6.** $-7(-8) = \underline{56}$ $7(8) = \_\_\_$ *"Negative 7 times negative 8 is equal to the opposite of 7 groups of 8 negatives, which is equal to 7 groups of positive 8"*
7. *"6 times negative 8 is equal to 6 groups of 8 negatives"* $6 \times -8 = \underline{-48}$	**8.** *"Negative 54 divided by 9 can be thought of as 9 groups of how many is negative 54?"* $-54 \div 9 = \underline{-6}$ $9(\_\_\_) = -54$
9. *"Negative 63 divided by 7 can be thought of as 7 groups of how many is negative 63?* $-63 \div 7 = \underline{-9}$ $7(\_\_\_) = -63$	**10.** $-8(9) = \underline{-72}$ $8(-9) = \_\_\_$ *"Negative 8 times 9 is equal to the opposite of 8 groups of positive 9, which is equal to 8 groups of negative 9*

Session 6: Self-Reflection

Learning Target: I will multiply and divide by integers between -10 and 10

Briefly discuss student responses

- What did I learn today about multiplying and dividing by integers between -10 and 10?

- How confident do I feel about multiplying and dividing by integers between -10 and 10? *(Thumbs up, down, or sideways)*

Quick Check - Form F

Name_____ Date_____

Learning Target: I will multiply and divide by integers between -10 and 10.

Directions: Write the answer to each problem. (Work time: 2 minutes)

1. -7 x 3	**2.** 6 x -9
3. -5 x -6	**4.** -8 ÷ 4
5. 10 ÷ -5	**6.** -12 ÷ -4

Name _____ Date _____

Learning Target: I will multiply and divide by integers between -10 and 10

Session 7: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Say what you are trying to find and use your understanding of integers to find the answer. Then, write three additional equations using the three integers.

1. $8(-6) = \_\_\_\_$	**2.** $-36 \div 4 = \_\_\_\_$
3. $9 \times -5 = \_\_\_\_$	**4.** $-6(8) = \_\_\_\_$
5. $-42 \div 7 = \_\_\_\_$	**6.** $-7(-9) = \_\_\_\_$
7. $7 \times -8 = \_\_\_\_$	**8.** $-54 \div 6 = \_\_\_\_$
9. $-28 \div 7 = \_\_\_\_$	**10.** $-8(6) = \_\_\_\_$

Name _____ Date _____

Learning Target: I will multiply and divide by integers between -10 and 10

Session 7: Guided Practice (We Do - Continued)

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

- Students take turns leading to multiply and divide integers.

11. $9(-4) = \_\_\_\_$	**12.** $-48 \div 6 = \_\_\_\_$
13. $8 \times -7 = \_\_\_\_$	**14.** $-6(7) = \_\_\_\_$
15. $-54 \div 9 = \_\_\_\_$	**16.** $-6(-8) = \_\_\_\_$
17. $9 \times -7 = \_\_\_\_$	**18.** $-81 \div 9 = \_\_\_\_$
19. $-54 \div 9 = \_\_\_\_$	**20.** $-9(6) = \_\_\_\_$

Session 7: Self-Reflection

Learning Target: I will multiply and divide by integers between -10 and 10

Briefly discuss student responses

- What did I learn today about multiplying and dividing by integers between -10 and 10?

- How confident do I feel about multiplying and dividing by integers between -10 and 10? *(Thumbs up, down, or sideways)*

Quick Check - Form G

Name_____ Date_____

Learning Target: I will multiply and divide by integers between -10 and 10.

Directions: Write the answer to each problem. (Work time: 2 minutes)

1. -9 x 2	**2.** 5 x -9
3. -4 x -8	**4.** -6 ÷ 3
5. 18 ÷ -2	**6.** -24 ÷ -8

Name _____ Date _____

Learning Target: I will multiply and divide by integers between -10 and 10

Session 8: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Say what you are trying to find and use your understanding of integers to find the answer. Then, write three additional equations using the three integers.

1. $7(-5) = \_\_\_\_$	**2.** $-28 \div 4 = \_\_\_\_$
3. $8 \times -3 = \_\_\_\_$	**4.** $-9(7) = \_\_\_\_$
5. $-35 \div 5 = \_\_\_\_$	**6.** $-6(-8) = \_\_\_\_$
7. $6 \times -9 = \_\_\_\_$	**8.** $-56 \div 8 = \_\_\_\_$
9. $-56 \div 7 = \_\_\_\_$	**10.** $-8(6) = \_\_\_\_$

Name _____ Date _____

Learning Target: I will multiply and divide by integers between -10 and 10

Session 8: Guided Practice (We Do - Continued)

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

- Students take turns leading to multiply and divide integers.

11. $8(-3) = \_\_\_\_$	**12.** $-42 \div 7 = \_\_\_\_$
13. $9 \times -6 = \_\_\_\_$	**14.** $-6(8) = \_\_\_\_$
15. $-56 \div 8 = \_\_\_\_$	**16.** $-4(-7) = \_\_\_\_$
17. $9 \times -3 = \_\_\_\_$	**18.** $-49 \div 7 = \_\_\_\_$
19. $-54 \div 6 = \_\_\_\_$	**20.** $-4(7) = \_\_\_\_$

Session 8: Self-Reflection

Learning Target: I will multiply and divide by integers between -10 and 10

Briefly discuss student responses

- What did I learn today about multiplying and dividing by integers between -10 and 10?

- How confident do I feel about multiplying and dividing by integers between -10 and 10? *(Thumbs up, down, or sideways)*

Quick Check - Form H

Name_____ Date_____

Learning Target: I will multiply and divide by integers between -10 and 10.

Directions: Write the answer to each problem. (Work time: 2 minutes)

1. -5 x 10	**2.** 4 x -7
3. -3 x -7	**4.** -8 ÷ 2
5. 4 ÷ -2	**6.** -20 ÷ -5

Independent Practice (You Do)

Learning Target: I will multiply and divide by integers between -10 and 10

Title of Game: "Multiply and Divide Integer: Match-ups"

Number of Players: 2

Objective: To be the first player to match all 5 cards.

Materials:

- Multiply and Divide Integers: **Problem** Cards (1 set)
- Multiply and Divide Integers: **Answer** Cards (1 set)
- Making Meaning: Match-ups: Recording sheet (1 per student - Optional)

Directions:

- Place a set of **Problem Cards** face-down in a row.
- Place a set of **Answer Cards** face-up underneath the row, 5 for each player.
- Player 1 turns over a **Problem Card** to see if it matches one of their **Answer cards**.
    - If there is an equivalent expression, say the addition expression, describe how to get the answer and the answer. Then, pick up the card and place it below your card.
    - If there is not an equivalent expression, then say "Not Equivalent" and turn the card back over.
- Player 2 turns over a **Problem Card** to see if it matches one of their **Answer cards**.
    - If there is an equivalent expression, say the addition expression, describe how to get the answer and the answer. Then, pick up the card and place it below your card.
    - If there is not an equivalent expression, then say "Not Equal" and turn the card back over.
- Repeat
- The winner is the first player to match all 5 cards.

Math Talk:

"I have an equivalent expression… 2 groups of 3 negatives is equal to 6 negatives."

Multiply and Divide Integers: Problem Cards (Set A)

Storage Suggestions: Copy the **Equation (Set A)** cards and **Answer (Set A)** cards in two different colors. Store 1 set of each in a sealable bag for each pair of students.

$5(-6) = \_\_\_\_$ *Set A*	$-5(-6) = \_\_\_\_$ *Set A*
$-7(8) = \_\_\_\_$ *Set A*	$-7 \times -8 = \_\_\_\_$ *Set A*
$-6(-8) = \_\_\_\_$ *Set A*	$6(-8) = \_\_\_\_$ *Set A*
$-28 \div -7 = \_\_\_\_$ *Set A*	$-28 \div 7 = \_\_\_\_$ *Set A*
$56 \div -7 = \_\_\_\_$ *Set A*	$-56 \div -7 = \_\_\_\_$ *Set A*

Multiply and Divide Integers: Answer Cards (Set A)

Storage Suggestions: Copy the **Equation (Set A)** cards and **Answer (Set A)** cards in two different colors. Store 1 set of each in a sealable bag for each pair of students.

-30 *Set A*	30 *Set A*
-56 *Set A*	56 *Set A*
48 *Set A*	-48 *Set A*
4 *Set A*	-4 *Set A*
-8 *Set A*	8 *Set A*

Multiply and Divide Integers: Problem Cards (Set B)

Storage Suggestions: Copy the **Equation (Set B)** cards and **Answer (Set B)** cards in two different colors. Store 1 set of each in a sealable bag for each pair of students.

$6(-7) = \_\_\_\_$ *Set B*	$-6(-7) = \_\_\_\_$ *Set B*
$-8(9) = \_\_\_\_$ *Set B*	$-8 \times -9 = \_\_\_\_$ *Set B*
$-7(-9) = \_\_\_\_$ *Set B*	$7(-9) = \_\_\_\_$ *Set B*
$-27 \div -3 = \_\_\_\_$ *Set B*	$-27 \div 3 = \_\_\_\_$ *Set B*
$54 \div -9 = \_\_\_\_$ *Set B*	$-54 \div -9 = \_\_\_\_$ *Set B*

Multiply and Divide Integers: Answer Cards (Set B)

Storage Suggestions: Copy the **Equation (Set B)** cards and **Answer (Set B)** cards in two different colors. Store 1 set of each in a sealable bag for each pair of students.

-42 *Set B*	42 *Set B*
-72 *Set B*	72 *Set B*
63 *Set B*	-63 *Set B*
9 *Set B*	-9 *Set B*
-6 *Set B*	6 *Set B*

Questions for Solving Word Problems

Q_1 ***What is the problem about?***
Q_2 ***What do I need to find?***
Q_3 ***What do I know?***
Q_4 ***What can I try?***
Q_5 ***Does my answer make sense?***

Steps for Solving Word Problems

Q_1. *What is the problem about?*
Q_2. *What do I need to find?*
Q_3. *What do I know?*
Q_4. *What can I try?*
Q_5. *Does my answer make sense?*