Grade 8 Units 4 & 5 Week 4

Parents: Please help your child choose the most appropriate assignment(s) to complete each day. When the day's assignment is done, students finish the two reflection statements on this page.

Please note Extra Practice activities are on-level for the grade level. Re-Engage activities give students additional support.

Special Education students should use the Re-Engage lessons as shown in the weekly plans.

	Monday	Tuesday	Wednesday	Thursday	Friday
Topic	Two-Step Equations	Solve Equations: Distributive Property	Pythagorean Theorem	The Converse of the Pythagorean Theorem	Distance on a Coordinate Plane
Assignment	Unit 4 Lesson 4 Extra Practice	Unit 4 Lesson 6 Re-Engage A Re-Engage B Extra Practice	Unit 5 Lesson 1 Re-Engage Unit 5 Lesson 2 Re-Engage Extra Practice	Unit 5 Lesson 5 Re-Engage Extra Practice	Unit 5 Lesson 7 Re-Engage A Re-Engage B Extra Practice
Video link	Unit 4 Lesson 4 **Student Support Video**	Unit 4 Lesson 6 **Student Support Video**	Unit 5 Lesson 1 **Student Support Video**	Unit 5 Lesson 5 **Student Support Video**	Unit 5 Lesson 7 **Student Support Video**
Fluency Practice	Integers Subtraction Fluency A	Integers Subtraction Fluency B	Integers Subtraction Fluency C	Integers Subtraction Fluency D	Integers Subtraction Fluency A
Reflection	One thing I was successful with is… One thing I need more help with is…	One thing I was successful with is… One thing I need more help with is…	One thing I was successful with is… One thing I need more help with is…	One thing I was successful with is… One thing I need more help with is…	One thing I was successful with is… One thing I need more help with is…

Find this packet on swunmath.com. Click on the hyperlinks to jump to the lesson videos.

Extra Practice

Unit 4 · Lessons 3-4: Two-Step Equations

Name: _____

Date: _____

Directions: Solve and check.

1. $-4y + 12 = -16$	2. $\frac{b}{3} - 5 = -9$
3. $17 = 4m - 7$	4. $4x - 7 = 13$
5. $-\frac{f}{5} + 12 = -2$	6. $3t - 2 = 19$
7. $\frac{-c}{3} + 8 = -7$	8. 16 = 8 +4a

Re-Engage

Unit 4 Lesson 5-6a: Use Distributive Property to Multiply

Name: _____

Date: _____

Model

$$68 \times 52$$

Directions: Distribute to Multiply

Step 1. Separate the larger number into simple addition

Step 2. Multiply across

$$(60 + 8) \times 52 =$$

$$(60 + 8) \times (50 + 2) =$$

$$(60 \times 50) + (60 \times 2) + (8 \times 50) + (8 \times 2) =$$

$$\underset{\text{partial product}}{3000} + \underset{\text{partial product}}{120} + \underset{\text{partial product}}{400} + \underset{\text{partial product}}{16} = \underset{\text{product}}{3536}$$

Structured Guided Practice

Directions: Distribute to Multiply.

1. 72×34

(+) × _____ =

(+) × (+) =

(×) + (×) + (×) + (×) =

_____ + _____ + _____ + _____ = _____

partial product; partial product; partial product; partial product; product

2. 26×54

(+) × _____ =

(+) × (+) =

(×) + (×) + (×) + (×) =

_____ + _____ + _____ + _____ = _____

partial product; partial product; partial product; partial product; product

Re-Engage

Unit 4 Lesson 5-6a: Use Distributive Property to Multiply

Student Practice

Directions: Distribute to Multiply.

1. 86 × 21	2. 63 × 34
3. 59 × 26	4. 72 × 44
5. 62 × 18	6. 55 × 33

Re-Engage

Unit 4 Lesson 5-6b: Distributing with Variables

Name: _____

Date: _____

Model

Model 1	Model 2
$5 \times (10a + 9)$	$4 \times (8t - 10)$
Directions: Distribute	Directions: Distribute
$5 \times (10a + 9)$	$4 \times (8t - 10)$
$(5 \times 10a) + (5 \times 9)$	$(4 \times 8t) + (4 \times -10)$
$= 50a + 45$	$= 32t + (-40)$
$50a + 45$	$32t - 40$

Structured Guided Practice

Directions: Distribute.

1. $12 \times (4s + 6)$	2. $8 \times (12d + 2)$
3. $5 \times (5t - 4)$	4. $7 \times (4n - 9)$

Re-Engage

Unit 4 Lesson 5-6b: Distributing with Variables

Student Practice

Directions: Distribute.

1. $7 \times (11d + 9)$	2. $2 \times (8f + 7)$
3. $5 \times (6b + 2)$	4. $9 \times (5k - 2)$
5. $2 \times (9w - 12)$	6. $6 \times (4n - 3)$

Extra Practice

Unit 4 · Lessons 5-6: Solve Equations: Distributive Property

Name: _____

Date: _____

Directions: Solve and check.

1. $-4(x+2)=-16$	2. $2(y-5)=10$
3. $15=3(z-2)$	4. $15-4(a-1)=27$
5. $17-2(b+12)=7$	6. $3-5(c-2)=18$
7. $2+3(2d+3)=-7$	8. $20=8+5f$

Re-Engage

Unit 5 Lesson 1: Perfect Squares

Name: _____

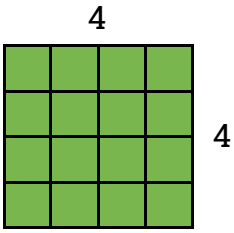
Date: _____

Model

Perfect Squares

A perfect square is the square of a whole number.
To find the square of a number, multiply it by itself.

$4^2 = 4 \cdot 4 = 16$



Perfect squares can be found along the diagonal of a multiplication table.

X	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Structured Guided Practice

Directions: Calculate the square.

1. 7^2	2. 8^2
3. $(-7)^2$	4. $(-8)^2$

Re-Engage

Unit 5 Lesson 1: Perfect Squares

Student Practice

Directions: Calculate the square.

1. 4^2	2. 12^2
3. 14^2	4. $(-4)^2$
5. $(-12)^2$	6. $(-14)^2$

Re-Engage

Unit 5 Lesson 2: Squares Roots

Name: _____

Date: _____

Model

Square Roots

Perfect Square Method

Find a perfect square that is a factor of 48.
Simplify the problem.

$$\sqrt{48} = \sqrt{16} \cdot \sqrt{3}$$
$$= 4 \cdot \sqrt{3}$$
$$= 4\sqrt{3}$$

Prime Factor Method

$$\sqrt{48} = \sqrt{2 \cdot 2 \cdot 2 \cdot 2 \cdot 3}$$
$$= \sqrt{2 \cdot 2} \cdot \sqrt{2 \cdot 2} \cdot \sqrt{3}$$
$$= 2 \cdot 2 \cdot \sqrt{3}$$
$$= 4 \cdot \sqrt{3}$$
$$= 4\sqrt{3}$$

Structured Guided Practice

Directions: Solve.

1. $\sqrt{225}$	2. $\sqrt{169}$
3. $\sqrt{12}$	4. $\sqrt{18}$

Re-Engage

Unit 5 Lesson 2: Squares Roots

Student Practice

Directions: Solve.

1. $\sqrt{121}$	2. $\sqrt{64}$
3. $\sqrt{196}$	4. ✓32
5. ✓75	6. ✓60

Extra Practice

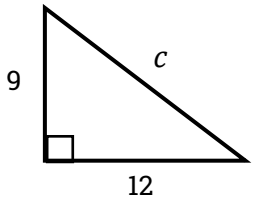
Unit 5 · Lessons 1, 2, and 3: The Pythagorean Theorem

Name: _____

Date: _____

Directions: Solve for the missing value.

1.



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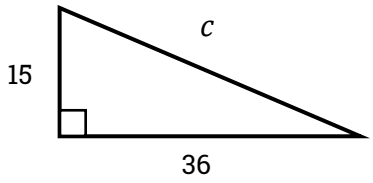

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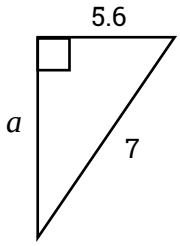

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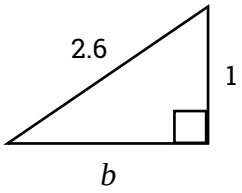

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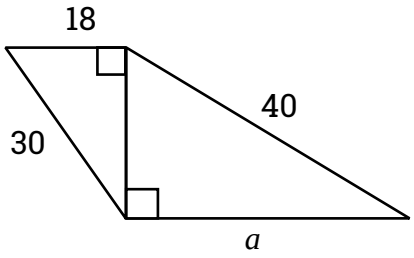
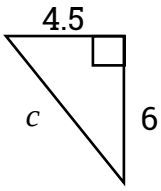


6. A park is 1 mile wide and 2.4 miles long. If you walk diagonally across the park, how long is your walk?

6. The skateboard ramp is 50 feet long. The base of the ramp is 30 feet. What is the height of the ramp?

8.



Re-Engage

Unit 5 Lesson 4-5: Right Triangles

Name: _____

Date: _____

Model

Determine Right Triangles

If $a^2 + b^2 = c^2$ then it is a right triangle.

Example 1:

If $a = 3.5^2 = 12.25$

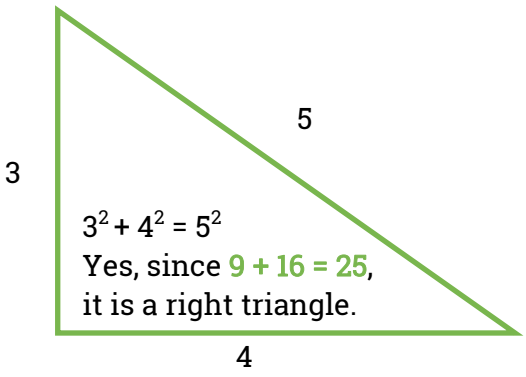
If $b = 6.2^2 = 17.64$

If $c = 5^2 = 25$

$12.25 + 17.64 \neq 25$

No, it is not a right triangle.

Example 2:



$3^2 + 4^2 = 5^2$

Yes, since $9 + 16 = 25$, it is a right triangle.

Structured Guided Practice

Directions: Determine if the equation creates a right triangle. Select = or ≠ .

1. $8^2 + 18^2 \square 20^2$

=	≠

2. $6^2 + 8^2 \square 10^2$

=	≠

Re-Engage

Unit 5 Lesson 4-5: Right Triangles

Student Practice

Directions: Determine if the following equations create a right triangle. Select = or ≠ .

1. $5^2 + 12^2 \square 13^2$

=	≠

2. $3^2 + 2.1^2 \square 5.5^2$

=	≠

3. $1.5^2 + 4^2 \square 3.3^2$

=	≠

4. $8^2 + 15^2 \square 17^2$

=	≠

5. $5^2 + 6^2 \square 7^2$

=	≠

6. $24^2 + 7^2 \square 25^2$

=	≠

Extra Practice

Unit 5 · Lessons 4 and 5: The Converse of the Pythagorean Theorem

Name: _____

Date: _____

Directions: Draw the triangle with the given lengths (in mm) and determine the type of triangle it makes. Also, determine if a triangle is not able to be drawn, state why it does not work.

1. 15, 60, 65	2. 10, 40, 60
3. 33, 45, 60	4. 25, 42, 50
5. 15, 35, 50	6. 32, 42, 65
7. 25, 28, 45	8. 30, 40, 50

Re-Engage

Unit 5 Lesson 6-7a: Plot Points on a Coordinate Plane

Name: _____

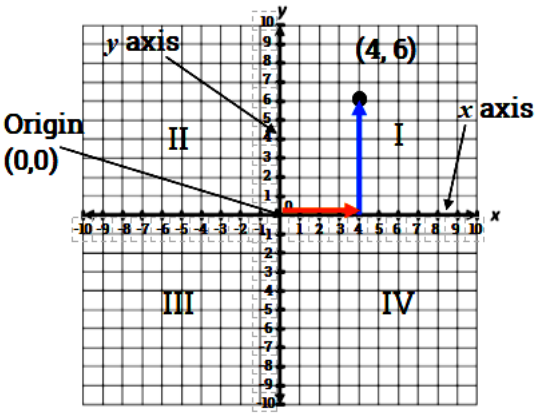
Date: _____

Model

Plot Points on Coordinate Plane

$(4, 6)$
(x, y)

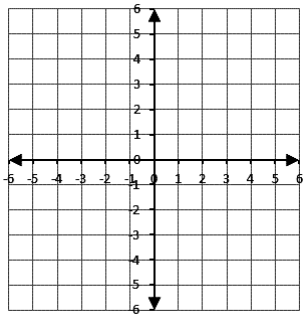
1. Begin at the origin, (0,0)
2. Move over on the x-axis ↔
3. Move up or down on the y-axis ↕



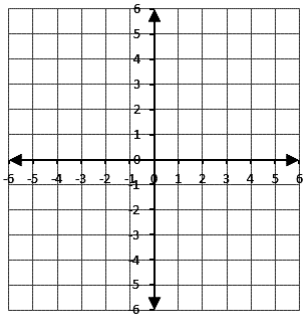
Structured Guided Practice

Directions: Graph the point.

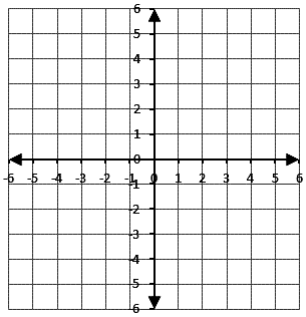
1. (6, 7)



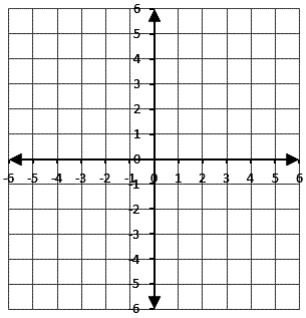
2. (5, 3)



3. (-4, 2)



4. (-6, 3)



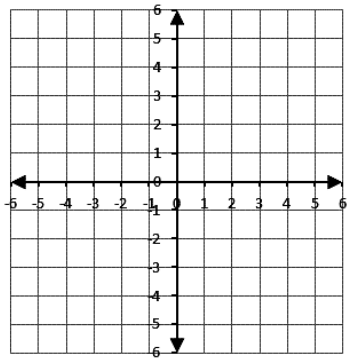
Re-Engage

Unit 5 Lesson 6-7a: Plot Points on a Coordinate Plane

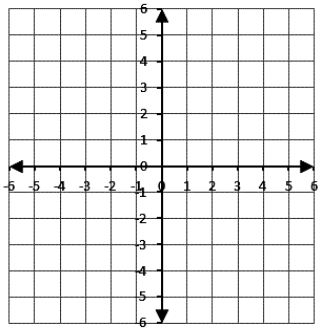
Student Practice

Directions: Graph the point.

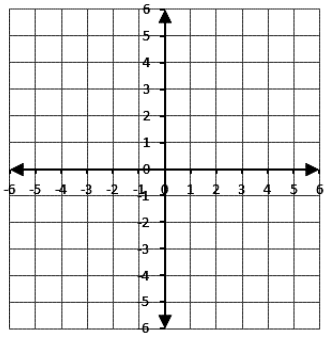
1. (4, 9)



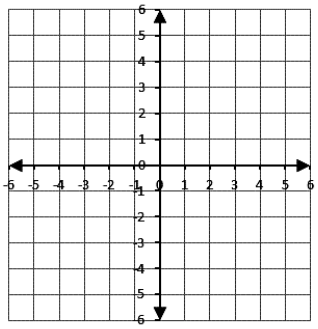
2. (6, 5)



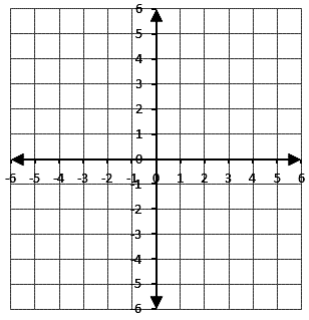
3. (2, 8)



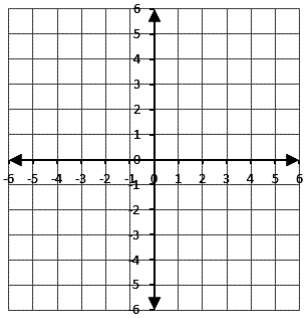
4. (-6, 3)



5. (-5, 7)



6. (-3, 3)



Re-Engage

Unit 5 Lesson 6-7b: Right Triangles on a Coordinate Plane

Name: _____

Date: _____

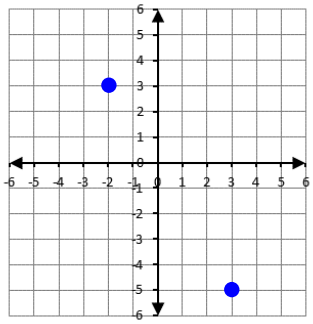
Model

Create a Right Triangle

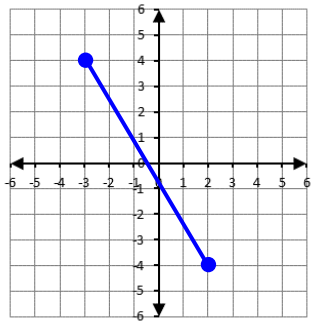
Use the following points to graph a right triangle.

$$(-2, 3) \text{ and } (3, -5)$$

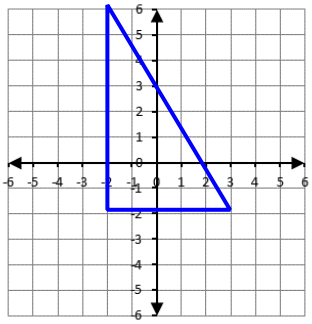
1. Plot $(-2, 3)$ and $(3, -5)$



2. Connect the points with a straight line.

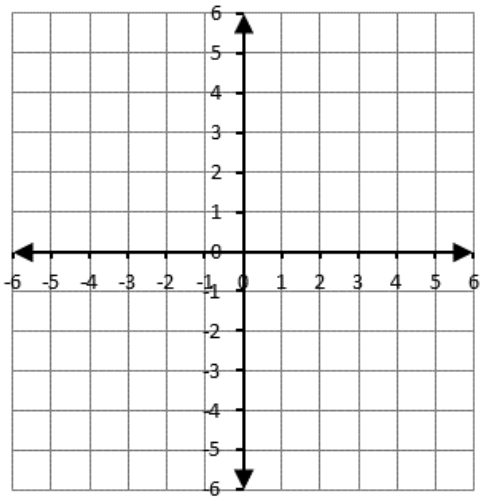


3. Extend the endpoints in a straight line to meet at a right angle, forming a right triangle.

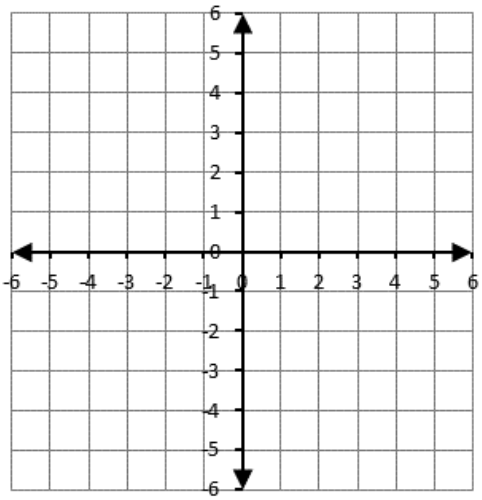


Structured Guided Practice

1. $(-4, 2)$ and $(3, -2)$



2. $(-2, 1)$ and $(2, -4)$



Re-Engage

Unit 5 Lesson 6-7b: Right Triangles on a Coordinate Plane

Student Practice

Directions: Graph the right triangle formed by the points.

1. $(-1, 2)$ and $(2, -3)$	2. $(-2, 1)$ and $(4, -2)$
3. $(-3, 4)$ and $(4, -1)$	4. $(-5, 2)$ and $(5, -2)$
5. $(-4, 3)$ and $(2, -4)$	6. $(-1, 4)$ and $(2, -3)$

Extra Practice

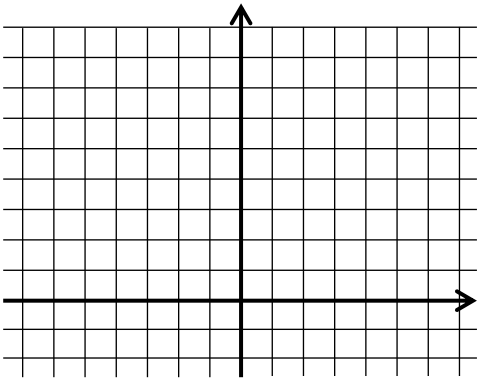
Unit 5 · Lessons 6-7: Distance on a Coordinate Plane

Name: _____

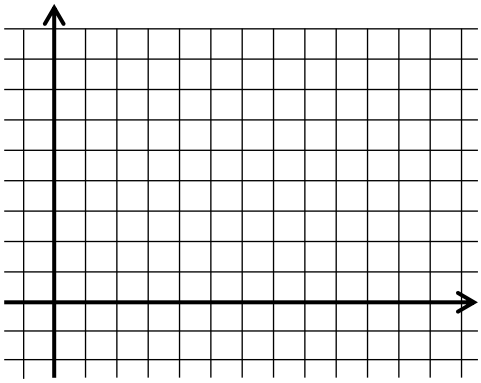
Date: _____

Directions: Find the distance between the points.

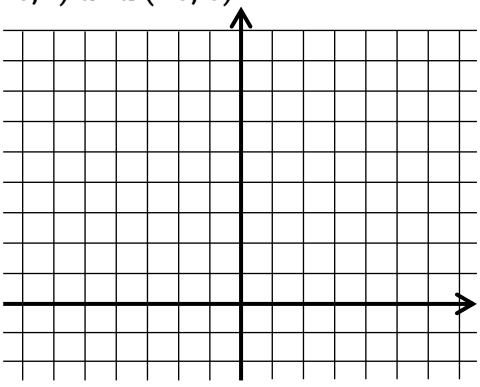
1. (−3, −2) and (5, 6)



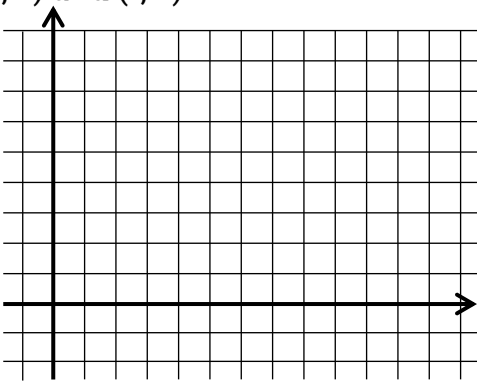
2. (1, 5) and (7, 0)



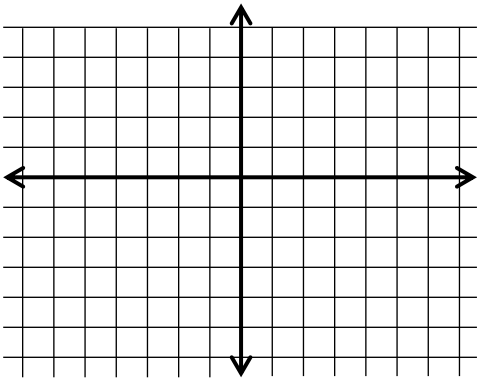
3. (−5, 1) and (−3, 3)



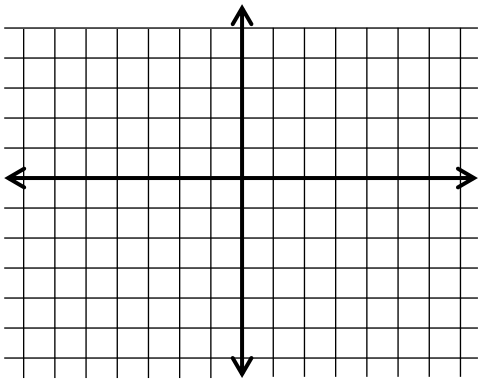
4. (5, 2) and (1, 7)



5. (−5, 3) and (5, 3)



6. (−7, 5) and (−7, −6)



Integers: Subtraction Fluency A
(70 items)

Name_____ **Date**_____

$-6 - -6 =$	$-6 - -2 =$	$6 - -7 =$	$-2 - -9 =$	$-4 + -6 =$	$-2 - 4 =$	$-9 - 8 =$
$-4 - -8 =$	$3 - -4 =$	$-7 - -6 =$	$-8 - -3 =$	$-3 - -7 =$	$5 - -2 =$	$7 - -6 =$
$-3 - -5 =$	$-5 - -5 =$	$-9 - -7 =$	$7 - -9 =$	$-6 - -4 =$	$-6 - 8 =$	$-2 - -3 =$
$-7 - -7 =$	$-5 - 7 =$	$-9 - 6 =$	$0 - 6 =$	$-8 - 5 =$	$-6 - 9 =$	$-5 - 4 =$
$4 - -4 =$	$8 - -8 =$	$9 - -3 =$	$-7 - -8 =$	$8 - -1 =$	$-3 - 2 =$	$-4 - -3 =$
$8 - -8 =$	$8 - -4 =$	$-9 - 9 =$	$-7 - -5 =$	$-9 - 1 =$	$-8 - 6 =$	$-2 - -8 =$
$-2 - 7 =$	$-7 - 3 =$	$3 - -8 =$	$-9 - 2 =$	$3 - -9 =$	$-4 - -5 =$	$-9 - -4 =$
$-5 - 6 =$	$-9 - -5 =$	$-2 - 2 =$	$6 - -1 =$	$-6 - -5 =$	$-8 - -9 =$	$7 - -4 =$
$-2 - 6 =$	$5 - -3 =$	$-9 - 4 =$	$8 - -2 =$	$2 - -7 =$	$-4 - 2 =$	$-3 - -6 =$
$5 - -9 =$	$-2 - -5 =$	$6 - -3 =$	$-4 - 9 =$	$-5 - 8 =$	$-3 - 3 =$	$4 - -7 =$

Integers: Subtraction Fluency B
(70 items)

Name_____ **Date**_____

$-5-6=$	$-9--5=$	$-2-2=$	$6--1=$	$-6--5=$	$-8--9=$	$7--4=$
$-5--9=$	$-2--5=$	$6--3=$	$-4-9=$	$-5-8=$	$-3-3=$	$4--7=$
$-2-6=$	$5--3=$	$-9-4=$	$8--2=$	$2--7=$	$-4-2=$	$-3--6=$
$-6--6=$	$-6--2=$	$6--7=$	$-2--9=$	$-4--6=$	$-2-4=$	$-9-8=$
$-4--8=$	$3--4=$	$-7--6=$	$-8--3=$	$-3--7=$	$5--2=$	$7--6=$
$-3--5=$	$-5--5=$	$-9--7=$	$7--9=$	$-6--4=$	$-6-8=$	$-2--3=$
$-7--7=$	$-5-7=$	$-9-6=$	$0-6=$	$-8-5=$	$-6-9=$	$-5-4=$
$4--4=$	$8--8=$	$9--3=$	$-7--8=$	$8--1=$	$-3-2=$	$-4--3=$
$8--8=$	$8--4=$	$-9-9=$	$-7--5=$	$-9-1=$	$-8-6=$	$-2--8=$
$-2-7=$	$-7-3=$	$3--8=$	$-9-2=$	$3--9=$	$-4--5=$	$-9--4=$

Integers: Subtraction Fluency C
(70 items)

Name_____ **Date**_____

$-7 - -7 =$	$-5 - 7 =$	$-9 - 6 =$	$0 - 6 =$	$-8 - 5 =$	$-6 - 9 =$	$-5 - 4 =$
$4 - -4 =$	$8 - -8 =$	$9 - -3 =$	$-7 - -8 =$	$8 - -1 =$	$-3 - 2 =$	$-4 - -3 =$
$8 - -8 =$	$8 - -4 =$	$-9 - 9 =$	$-7 - -5 =$	$-9 - 1 =$	$-8 - 6 =$	$-2 - -8 =$
$-5 - 6 =$	$-9 - -5 =$	$-2 - 2 =$	$6 - -1 =$	$-6 - -5 =$	$-8 - -9 =$	$7 - -4 =$
$-2 - 6 =$	$5 - -3 =$	$-9 - 4 =$	$8 - -2 =$	$2 - -7 =$	$-4 - 2 =$	$-3 - -6 =$
$-5 - -9 =$	$-2 - -5 =$	$6 - -3 =$	$-4 - 9 =$	$-5 - 8 =$	$-3 - 3 =$	$4 - -7 =$
$-6 - -6 =$	$-6 - -2 =$	$6 - -7 =$	$-2 - -9 =$	$-4 - -6 =$	$-2 - 4 =$	$-9 - 8 =$
$-4 - -8 =$	$3 - -4 =$	$-7 - -6 =$	$-8 - -3 =$	$-3 - -7 =$	$5 - -2 =$	$7 - -6 =$
$-3 - -5 =$	$-5 - -5 =$	$-9 - -7 =$	$7 - -9 =$	$-6 - -4 =$	$-6 - 8 =$	$-2 - -3 =$
$-2 - 7 =$	$-7 - 3 =$	$3 - -8 =$	$-9 - 2 =$	$3 - -9 =$	$-4 - -5 =$	$-9 - -4 =$

Integers: Subtraction Fluency D
(70 items)

Name_____ **Date**_____

$-3 - -5 =$	$-5 - -5 =$	$-9 - -7 =$	$7 - -9 =$	$-6 - -4 =$	$-6 - 8 =$	$-2 - -3 =$
$-7 - -7 =$	$-5 - 7 =$	$-9 - 6 =$	$0 - 6 =$	$-8 - 5 =$	$-6 - 9 =$	$-5 - 4 =$
$4 - -4 =$	$8 - -8 =$	$9 - -3 =$	$-7 - -8 =$	$8 - -1 =$	$-3 - 2 =$	$-4 - -3 =$
$8 - -8 =$	$8 - -4 =$	$-9 - 9 =$	$-7 - -5 =$	$-9 - 1 =$	$-8 - 6 =$	$-2 - -8 =$
$-2 - 7 =$	$-7 - 3 =$	$3 - -8 =$	$-9 - 2 =$	$3 - -9 =$	$-4 - -5 =$	$-9 - -4 =$
$-6 - -6 =$	$-6 - -2 =$	$6 - -7 =$	$-2 - -9 =$	$-4 - -6 =$	$-2 - 4 =$	$-9 - 8 =$
$-4 - -8 =$	$3 - -4 =$	$-7 - -6 =$	$-8 - -3 =$	$-3 - -7 =$	$5 - -2 =$	$7 - -6 =$
$-5 - 6 =$	$-9 - -5 =$	$-2 - 2 =$	$6 - -1 =$	$-6 - -5 =$	$-8 - -9 =$	$7 - -4 =$
$-5 - -9 =$	$-2 - -5 =$	$6 - -3 =$	$-4 - 9 =$	$-5 - 8 =$	$-3 - 3 =$	$4 - -7 =$
$-2 - 6 =$	$5 - -3 =$	$-9 - 4 =$	$8 - -2 =$	$2 - -7 =$	$-4 - 2 =$	$-3 - -6 =$

Integers: Subtraction Fluency A
(70 items)

Name_____ **Date**_____

$-6 - -6 =$	$-6 - -2 =$	$6 - -7 =$	$-2 - -9 =$	$-4 + -6 =$	$-2 - 4 =$	$-9 - 8 =$
$-4 - -8 =$	$3 - -4 =$	$-7 - -6 =$	$-8 - -3 =$	$-3 - -7 =$	$5 - -2 =$	$7 - -6 =$
$-3 - -5 =$	$-5 - -5 =$	$-9 - -7 =$	$7 - -9 =$	$-6 - -4 =$	$-6 - 8 =$	$-2 - -3 =$
$-7 - -7 =$	$-5 - 7 =$	$-9 - 6 =$	$0 - 6 =$	$-8 - 5 =$	$-6 - 9 =$	$-5 - 4 =$
$4 - -4 =$	$8 - -8 =$	$9 - -3 =$	$-7 - -8 =$	$8 - -1 =$	$-3 - 2 =$	$-4 - -3 =$
$8 - -8 =$	$8 - -4 =$	$-9 - 9 =$	$-7 - -5 =$	$-9 - 1 =$	$-8 - 6 =$	$-2 - -8 =$
$-2 - 7 =$	$-7 - 3 =$	$3 - -8 =$	$-9 - 2 =$	$3 - -9 =$	$-4 - -5 =$	$-9 - -4 =$
$-5 - 6 =$	$-9 - -5 =$	$-2 - 2 =$	$6 - -1 =$	$-6 - -5 =$	$-8 - -9 =$	$7 - -4 =$
$-2 - 6 =$	$5 - -3 =$	$-9 - 4 =$	$8 - -2 =$	$2 - -7 =$	$-4 - 2 =$	$-3 - -6 =$
$5 - -9 =$	$-2 - -5 =$	$6 - -3 =$	$-4 - 9 =$	$-5 - 8 =$	$-3 - 3 =$	$4 - -7 =$