Grade 8 Unit 6 Week 5

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
H	obic i	Determine slope of a line when given two points.	Use slope to determine a missing coordinate.	Graph a line.	Write linear equations from a graph.	Convert linear equations into slope intercept form.
	Assignment	Unit 6 Lesson 2 Re-Engage Extra Practice	Unit 6 Lesson 3 Re-Engage A Re-Engage B Extra Practice	Unit 6 Lesson 6 Re-Engage Extra Practice	Unit 6 Lesson 7 Re-Engage Unit 6 Lesson 8 Re-Engage Unit 6 Lesson 9 Re-Engage Extra Practice	Unit 6 Lesson 10 Re-Engage Extra Practice
Video	link	<u>Unit 6 Lesson 2</u> <u>Student Support Video</u>	<u>Unit 6 Lesson 3</u> Student Support Video	<u>Unit 6 Lesson 6</u> Student Support Video	Unit 6 Lesson 7 Unit 6 Lesson 8 Unit 6 Lesson 9 Student Support Video	Unit 6 Lesson 10 Student Support Video
Fluency	Practice	Integers Addition Fluency A	Integers Subtraction Fluency A	Integers Multiplication Fluency A	Integers Division Fluency A	Fraction-Decimal Conversion Fluency A
9.0	Kerlection	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.



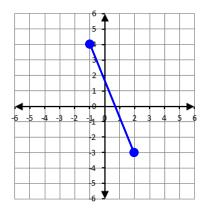
Model

Positive or Negative Slope

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

- 1. Plot (-1, 4) and (2, -3) and connect with a line.
- 2. Identify the direction of the line from the first point to the second.

Line heading down is <u>negative</u>. Line heading up is <u>positive</u>.

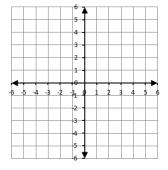


* This line is a negative slope.

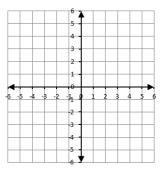
Structured Guided Practice

Directions: Graph the line to determine if it is positive or negative slope.

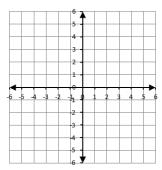
1. (-2, 3) and (4, 5)



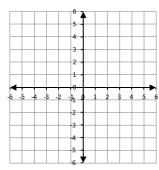
2. (4, 4) and (-2, -3)



3. (-3, 4) and (3, -6)



4. (-3, 5) and (1, -3)



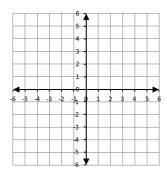
Re-Engage

Unit 6 Lesson 2: Determine Positive & Negative Lines

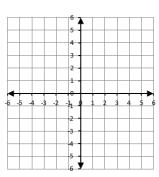
Student Practice

Directions: Graph the line to determine if it is positive or negative slope.

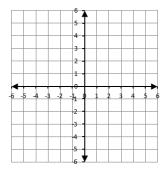
1. (-2, 4) and (3, 3)



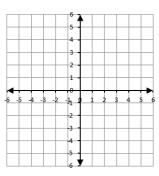
2. (-3, -5) and (5, 2)



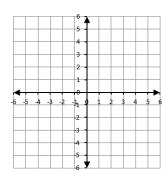
3. (-1, -2) and (2, 4)



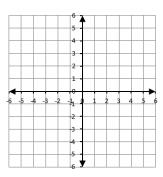
4. (-2, 2) and (5, -6)



5. (-3, 1) and (4, -5)

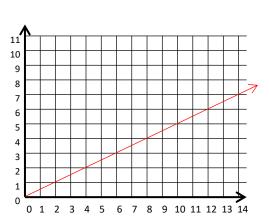


6. (-4, 2) and (3, -1)



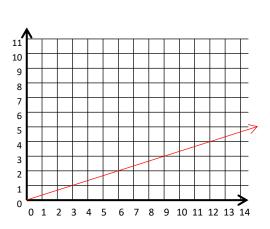
Directions: Determine the slope of each graph.

1.



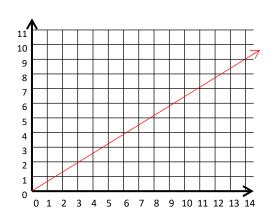
Slope: _____

2.



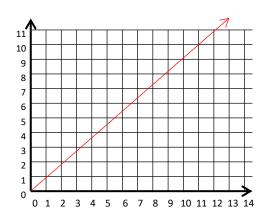
Slope:

3.



Slope: _____

4.



Slope: _____

5. (2, 10) and (5, 8)

6. (3, 11) and (8, 9)

Slope:

Slope:

7. (0, 9) and (9, 3)

8. (-4, 2) and (6, 5)

Slope:

Slope: _____

Re-Engage

Unit 6 Lesson 3a: Solving Proportions - Part 1



Name:

Date:

Model

Solve Proportions

$$\frac{1}{2} \times \frac{x-4}{10}$$

$$1 \times 10 = 2 \times (x-4)$$

$$2x - 8 = 10$$

$$x = 9$$

$$2x - 8 = 10$$

$$+8 +8$$

$$2x = 18$$

$$\frac{2x}{2} = \frac{18}{2}$$

Structured Guided Practice

1.
$$\frac{3}{5} = \frac{m-2}{10}$$

$$2. \quad \frac{4}{7} = \frac{n-5}{21}$$

3.
$$\frac{4}{5} = \frac{r-3}{15}$$

4.
$$\frac{7}{8} = \frac{x-2}{16}$$



Student Practice

1.
$$\frac{2}{3} = \frac{x-6}{9}$$

2.
$$\frac{4}{5} = \frac{s-5}{25}$$

3.
$$\frac{3}{4} = \frac{y-2}{12}$$

4.
$$\frac{5}{6} = \frac{r-4}{24}$$

5.
$$\frac{3}{8} = \frac{q-9}{16}$$

6.
$$\frac{1}{4} = \frac{p-4}{20}$$



Model

Solve Proportions

$$\frac{2}{3} \times \frac{12}{r+5}$$

$$2r + 10 = 36$$

$$2r + 10 = 36$$

$$-10 - 10$$

$$2r = 26$$

$$\frac{2r}{2} = \frac{26}{2}$$

Structured Guided Practice

$$1. \quad \frac{4}{5} = \frac{8}{s+3}$$

2.
$$\frac{3}{4} = \frac{6}{d+4}$$

3.
$$\frac{1}{2} = \frac{8}{r+5}$$

4.
$$\frac{5}{6} = \frac{10}{x+6}$$



Student Practice

1.
$$\frac{6}{7} = \frac{12}{g+5}$$

2.
$$\frac{2}{3} = \frac{14}{q+6}$$

3.
$$\frac{3}{4} = \frac{15}{x+2}$$

$$4. \qquad \frac{2}{5} = \frac{8}{r+7}$$

5.
$$\frac{5}{6} = \frac{10}{z+4}$$

6.
$$\frac{1}{2} = \frac{15}{p+8}$$

Extra Practice

Unit 6 · Lesson 3: Slope & Missing Coordinates

Name:

Date:

Directions: Find the missing coordinate.

1. Slope of -8

(5, y) and (3, 10)

2. Slope of -5

(-2, 1) and (1, y)

3. Slope of 5/2

(-5, y) and (-7, -5)

4. Slope of 3/4

(3, y) and (-5, -8)

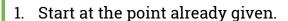
Grade 8 Unit 6 Lesson 3 EP



Slope =

Model

Graph a Line

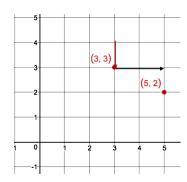


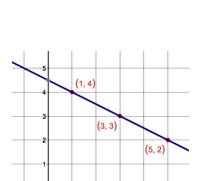
2. Use the slope $-\frac{1}{2}$ to move.

Go $\underline{\text{down 1}}$ and to the $\underline{\text{right 2}}$ places.



4. Connect the points to make a line.



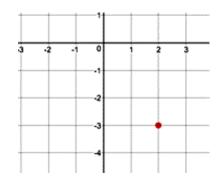


* Note: A positive slope moves UP first, and a negative slope moves DOWN first.

Structured Guided Practice

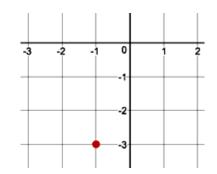
Directions: Graph the line using the given coordinate and slope.

1.



 $Slope = -\frac{1}{2}$

2.



Slope = $\frac{2}{3}$

Re-EngageUnit 6 Lesson 5-6: Graph a Line

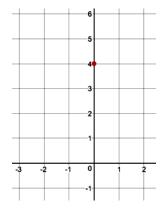


Student Practice

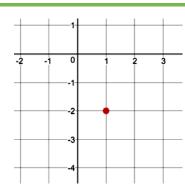
Directions: Graph the line using the given coordinate and slope.

 $Slope = -\frac{1}{2}$

1.

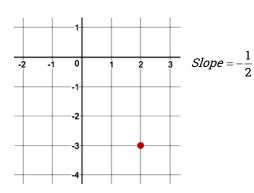


2.

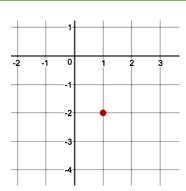


 $Slope = -\frac{1}{2}$

3.

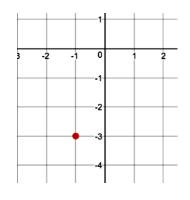


4.



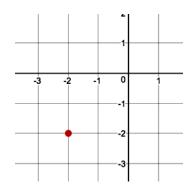
Slope = $\frac{2}{3}$

5.



6.

Slope = $\frac{2}{3}$



Slope = $\frac{2}{3}$

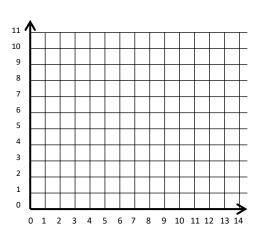
Extra Practice Unit 6. Lessons 5-6: Graph a Line

Name:

Date:

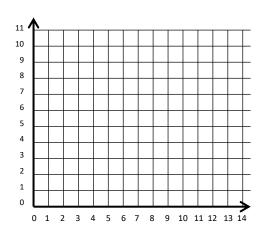
Directions: Graph the line and determine a point on the line. If a point is given, determine a second point.

1. Slope is 3, y-intercept is 1



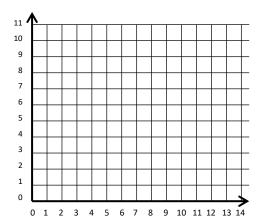
Point A _____

Slope is -1, y-intercept is 3 2.



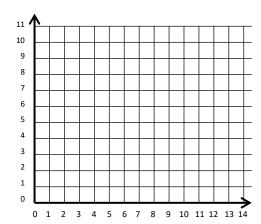
Point A

3. $y = \frac{2}{3}x + 4$



Point A _____

4. $y = \frac{3}{5}x + 2$

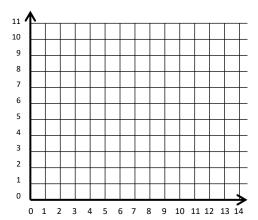


Point A _____

Extra Practice

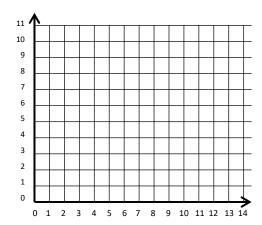
Unit 6. Lessons 5 & 6: Graph a Line

5. Slope of $-\frac{2}{3}$ and includes the point (1, 6)



Point B _____

6. Slope of $\frac{1}{3}$ and includes the point (0, 2)



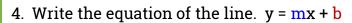
Point B _____



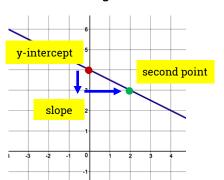
Model

Write Equations from a Graph

- 1. Write the point where the line crosses the y-axis.
 - This point is found by moving straight up or down from the origin.
 - The y-intercept is (0,4) so b = 4.
- 2. Find another point on the line.
- 3. Calculate the slope.
 - The slope is $\frac{rise}{run} = \frac{-1}{2}$, so m = $-\frac{1}{2}$



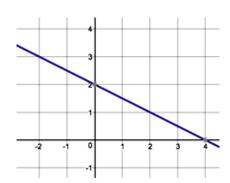
•
$$y = -\frac{1}{2} x + 4$$



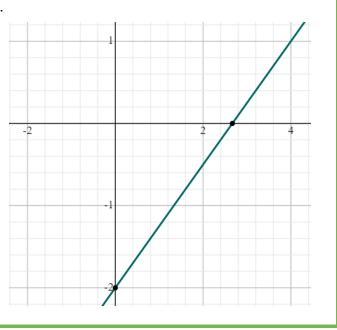
Structured Guided Practice

Directions: Write the equation of the line.

1.



2.



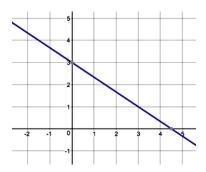
Re-EngageUnit 6 Lesson 7: Write Equations From a Graph



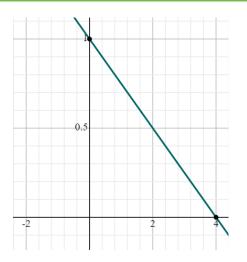
Student Practice

Directions: Write the equation of the line.

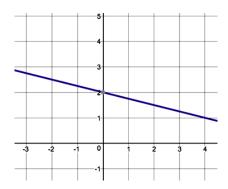
1.



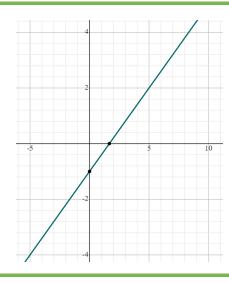
2.



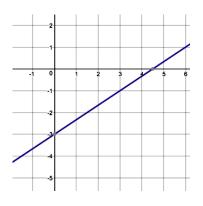
3.



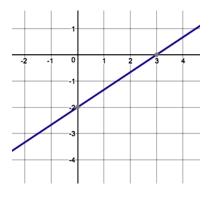
4.



5.



6.





Model

$$4y = 7x + b$$

Given (-3, 4), what is the value of b?

- 1. Substitute x and y into the equation.
- 2. Simplify.

- 4y = 7x + b
 - 4(4) = 7(-3) + b16 = -21 + b
- 16 = -21 + b
 - +21 +21 37 = b
 - or
 - b = 37

Structured Guided Practice

Directions: Solve for b.

1. (-2, 4) in 2y = 3x + b

2. (-1, 3) in 6y = 2x + b

3. (-5, 1) in 3y = 6x + b

4. (-6, 3) in 4y = 5x + b



Student Practice

Directions: Solve for b.

1.
$$(-3, 6)$$
 in $3y = 2x + b$

2.
$$(-2, 3)$$
 in $5y = 7x + b$

3.
$$(-5, 2)$$
 in $2y = 2x + b$

4.
$$(-7, 5)$$
 in $3y = 4x + b$

5.
$$(-4, 6)$$
 in $7y = 2x + b$

6.
$$(-1, 2)$$
 in $2y = 3x + b$



Write the Equation of the Line

slope =
$$\frac{-2}{3}$$
 and y-intercept = -3

$$y = mx + b$$

- 1. Plug in the slope (m).
- 2. Plug in the y-intercept (b).

$$y = \frac{-2}{3}x + -3$$

3. Write the equation.

Structured Guided Practice

Directions: Write the equation.

1. slope=
$$-\frac{4}{5}$$
 and y-intercept = 3

2. slope =
$$-\frac{1}{3}$$
 and y-intercept = 2

3. slope =
$$\frac{3}{7}$$
 and y-intercept = -5

4. slope =
$$\frac{1}{5}$$
 and y-intercept = -2



Student Practice

Directions: Write the equation.

1. slope =
$$-\frac{3}{5}$$
 and y-intercept = 2

2. slope =
$$-\frac{1}{7}$$
 and y-intercept = 3

3. slope =
$$-\frac{2}{3}$$
 and y-intercept =1

4. slope =
$$\frac{3}{4}$$
 and y-intercept = -4

5. slope =
$$\frac{1}{2}$$
 and y-intercept =-1

6. slope =
$$\frac{3}{5}$$
 and y-intercept = -3

Extra Practice

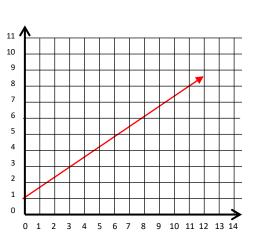
Unit 6. Lessons 7-9: Write Linear Equations

Name:

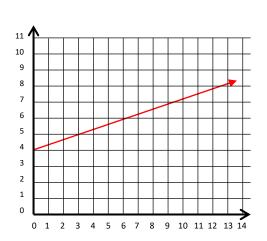
Date: _____

Directions: Write the equation for the given information.

1.



2.



3. Slope of 1 through point (-3, -1)

4. Slope of -2 through point (5, 2)

5. (0, -5) and (5, 5)

6. (-1, 7) and (3, 5)

7. (-8, 0) and (10, 6)

8. (-7, 5) and (1, 5)



Model

Standard Form

Slope-Intercept Form

$$6x + 2y = 24$$



$$y = -3x + 12$$

1. Isolate the y:

Subtract 6x from both sides

$$2y = -6x + 24$$

2. Divide by the coefficient of y. Divide each side by 2.

$$y = -3x + 12$$

y = mx + b

Structured Guided Practice

Directions: Convert the standard form to slope-intercept form.

1.
$$3x + y = 14$$

2.
$$3x - y = 9$$

Re-Engage

Unit 6 Lesson 10: Convert Linear Equations



Student Practice

Directions: Convert the standard form to slope-intercept form.

1.
$$3x - y = 14$$

2.
$$3x + y = 9$$

3.
$$2x + 3y = 10$$

4.
$$-5x + y = -12$$

5.
$$8x + 4y = 16$$

6.
$$6x + 3y = 21$$

Extra Practice

Unit 6. Lesson 10: Convert Linear Equations

Name:

Date:

Directions: Convert each equation into slope-intercept form.

1.
$$2x - 9y = 6$$

2.
$$5x + y = -1$$

$$3.12x + 4y = -16$$

4.
$$9x + 18y = -10$$

5.
$$4x + 2y = 10$$

6.
$$5x - 2y = -16$$

7.
$$-x + y = 10$$

8.
$$x - 2y = 15$$

Integers: Addition Fluency A (70 items)

Name_____ Date____

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

Integers: Subtraction
Fluency A
(70 items)

Name_____ Date____

-66 =	-62 =	67 =	-29 =	-4 + -6 =	-2 - 4 =	-9 - 8 =
-48 =	34 =	-76 =	-83 =	-37 =	52 =	76 =
-35 =	-55 =	-97 =	79 =	-64 =	-6 - 8 =	-23 =
-77 =	-5 - 7 =	-9 - 6 =	0 - 6 =	-8 - 5 =	-6 - 9 =	-5 - 4 =
44 =	88 =	93 =	-78 =	81 =	-3 - 2 =	-43 =
88 =	84 =	-9 - 9 =	−7 − −5 =	-9 - 1 =	-8 - 6 =	-28 =
-2 - 7 =	-7 - 3 =	38 =	-9 - 2 =	39 =	-45 =	-94 =
-5 - 6 =	-95 =	-2 - 2 =	61 =	-65 =	-89 =	74 =
-2 - 6 =	53 =	-9 - 4 =	82 =	27 =	-4 - 2 =	-36 =
59 =	-25 =	63 =	-4-9=	-5 - 8 =	-3 - 3 =	47 =

Integers: Multiplication
Fluency A
(70 items)

Name______Date____

−2·−5 =	-6 ⋅3 =	4 · -2 =	−8 · 7 =	-5·-5 =	-3·-5 =	$-4 \cdot 7 =$
3 ⋅ −3 =	-8 · 2 =	−7·−1 =	-8 ⋅ 2 =	-2·-9 =	-8 · -3 =	2 · -6 =
9 · -8 =	-6 · 1 =	$-5\cdot 3 =$	−3 · 9 =	-6·-5 =	-9 · -5 =	-4 · -5 =
-8 ⋅8 =	-2·-8 =	9 · -1 =	-8 · 4 =	8·-5 =	6 · -8 =	<i>-</i> 7 · <i>-</i> 7 =
-2 · -3 =	-9 ⋅3 =	-7·−8 =	$-4 \cdot 4 =$	5·-4 =	8 · -6 =	-6·−2 =
-4 · -6 =	9 · -2 =	6 · -4 =	$-7 \cdot 4 =$	-4·-8 =	-6 ⋅ 7 =	<i>-</i> 3 · <i>-</i> 7 =
$-3 \cdot 4 =$	-7·-2 =	-6 ⋅ -6 =	-9 · -7 =	$-7 \cdot 9 =$	-3·-6 =	−5 · 9 =
4 · -9 =	5·−8 =	9 · -6 =	2 · -7 =	2 · -4 =	$-7 \cdot 6 =$	−8 · 1 =
2·-2=	6 · -9 =	5·-7 =	0 · 9 =	-6·-4 =	8 · -8 =	-7·-5 =
3 ⋅ −2 =	-4 · -3 =	-9·-4 =	5 · -6	7 · -3 =	-3 ⋅ 8 =	−5 · 2 =

Integers: Division
Fluency A
(70 items)

Name_____ Date____

$-27 \div -9 =$	15 ÷ −3 =	-14 ÷ 7 =	16 ÷ −2 =	$-32 \div -4 =$	56 ÷ −8 =	$-15 \div -5 =$
$36 \div -6 =$	-12 ÷ 2 =	-48 ÷ 6 =	$-72 \div -8 =$	$-25 \div -5 =$	0 ÷ -6 =	$-24 \div -8 =$
$-45 \div -5 =$	$-45 \div -9 =$	$-21 \div -3 =$	-28 ÷ 7 =	$-35 \div -5 =$	6 ÷ -6 =	49 ÷ -7 =
12 ÷ −4 =	-81 ÷ −9 =	$-9 \div 3 =$	$-24 \div -3 =$	$-30 \div 5 =$	21 ÷ -7 =	$-64 \div 8 =$
$-27 \div -9 =$	−63 ÷ 9 =	−12 ÷ −6 =	-6 ÷ 2 =	-4 ÷ 2 =	$-63 \div -7 =$	$-20 \div -4 =$
−32 ÷ 8 =	72 ÷ -9 =	$-24 \div -6 =$	-10 ÷ 2 =	-48 ÷ −6 =	16 ÷ −8 =	-28 ÷ 4 =
-48 ÷ 8 =	10 ÷ −5 =	$-12 \div -3 =$	$-36 \div 9 =$	−9 ÷ −9 =	$-36 \div 9 =$	$-42 \div -7 =$
$-7 \div -7 =$	8 ÷ −2 =	$-16 \div -4 =$	$-40 \div -8 =$	-24 ÷ 4 =	56 ÷ −7 =	-18 ÷ 6 =
54 ÷ -9 =	$-5 \div 5 =$	$18 \div -3 =$	$20 \div -5 =$	8 ÷ -8 =	$-56 \div -8 =$	$-15 \div -5 =$
8 ÷ -4 =	$-6 \div -3 =$	-40 ÷ 5 =	$35 \div -7 =$	18 ÷ −9 =	-18 ÷ −2 =	36 ÷ −4 =

Fraction/Decimal
Conversion A
(70 items)

Name	Date
	-

Directions: Convert fractions to decimals and decimals to fractions.

$\frac{5}{10} =$	0.4 =	0.63 =	$\frac{17}{100}$ =	$\frac{1}{2}$ =	0.9 =	$\frac{4}{5}$ =	$\frac{31}{100}$ =	0.83 =	0.01 =
$\frac{1}{4}$ =	0.2 =	$\frac{2}{3}$ =	0.1 =	0.59 =	$\frac{8}{10} =$	0.65 =	$\frac{1}{5}$ =	$\frac{27}{100}$ =	$\frac{8}{25} =$
0.99 =	$\frac{13}{20} =$	0.37 =	$\frac{57}{100}$ =	$\frac{1}{3}$ =	0.7 =	$\frac{83}{100} =$	0.04 =	$\frac{2}{10} =$	0.6 =
0.2 =	$\frac{14}{20} =$	0.09 =	$\frac{3}{10} =$	0.85 =	$\frac{3}{5} =$	$\frac{9}{10} =$	$\frac{93}{100}$ =	0.45 =	0.5 =
$\frac{74}{100}$ =	$\frac{23}{50} =$	0.75 =	0.25 =	$\frac{18}{50} =$	0.1 =	$\frac{1}{2}$ =	0.8 =	0.35 =	$\frac{19}{20}$ =
0.79 =	$\frac{22}{25} =$	$\frac{37}{50}$ =	$\frac{72}{100}$ =	0.2 =	0.02 =	$\frac{7}{10} =$	$\frac{12}{20}$ =	0.95 =	0.3 =
0.8 =	0.04 =	$\frac{18}{25} =$	0.08 =	$\frac{44}{50}$ =	0.9 =	$\frac{53}{100}$ =	0.15 =	$\frac{1}{10} =$	$\frac{1}{100} =$