$\qquad$ Date $\qquad$

## Lesson 15: The Slope of a Non-Vertical Line

## Exit Ticket

1. What is the slope of this non-vertical line? Use your transparency if needed.

2. What is the slope of this non-vertical line? Use your transparency if needed.

$\qquad$

## Lesson 16: The Computation of the Slope of a Non-Vertical Line

## Exit Ticket

Find the rate of change of the line by completing parts (a) and (b).

a. Select any two points on the line to label as $P$ and $R$. Name their coordinates.
b. Compute the rate of change of the line.
$\qquad$ Date $\qquad$

# Lesson 17: The Line Joining Two Distinct Points of the Graph 

 $y=m x+b$ Has Slope $m$
## Exit Ticket

1. Solve the following equation for $y: 35 x-7 y=49$.
2. What is the slope of the equation in Problem 1?
3. Show, using similar triangles, why the graph of an equation of the form $y=m x$ is a line with slope $m$.

$\qquad$ Date $\qquad$

## Lesson 18: There Is Only One Line Passing Through a Given Point with a Given Slope

## Exit Ticket

Mrs. Hodson said that the graphs of the equations below are incorrect. Find the student's errors, and correctly graph the equations.

1. Student graph of $y=\frac{1}{2} x+4$ (
2. Student graph of $y=-\frac{3}{5} x-1$ :


Error:

Correct graph of the equation:

$\qquad$ Date $\qquad$

## Lesson 19: The Graph of a Linear Equation in Two Variables Is a

## Line

## Exit Ticket

1. Graph the equation $y=\frac{5}{4} x-10$ using the $y$-intercept point and slope.

2. Graph the equation $5 x-4 y=40$ using intercepts.

3. What can you conclude about the equations $y=\frac{5}{4} x-10$ and $5 x-4 y=40$ ?
$\qquad$

## Lesson 20: Every Line Is a Graph of a Linear Equation

## Exit Ticket

1. Write an equation in slope-intercept form that represents the line shown.

2. Use the properties of equality to change the equation you wrote for Problem 1 from slope-intercept form, $y=m x+b$, to standard form, $a x+b y=c$, where $a, b$, and $c$ are integers, and $a$ is not negative.
3. Write an equation in slope-intercept form that represents the line shown.

4. Use the properties of equality to change the equation you wrote for Problem 3 from slope-intercept form, $y=m x+b$, to standard form, $a x+b y=c$, where $a, b$, and $c$ are integers, and $a$ is not negative.
$\qquad$

## Lesson 21: Some Facts About Graphs of Linear Equations in Two

## Variables

## Exit Ticket

1. Write the equation for the line $l$ shown in the figure below.

2. A line goes through the point $(5,-7)$ and has slope $m=-3$. Write the equation that represents the line.
$\qquad$ Date $\qquad$

## Lesson 22: Constant Rates Revisited

## Exit Ticket

1. Water flows out of Pipe $A$ at a constant rate. Pipe $A$ can fill 3 buckets of the same size in 14 minutes. Write a linear equation that represents the situation.
2. The figure below represents the rate at which Pipe B can fill the same-sized buckets.


Which pipe fills buckets faster? Explain.

Name $\qquad$ Date $\qquad$

## Lesson 23: The Defining Equation of a Line

## Exit Ticket

1. Do the graphs of the equations $-16 x+12 y=33$ and $-4 x+3 y=8$ graph as the same line? Why or why not?
2. Given the equation $3 x-y=11$, write another equation that will have the same graph. Explain why.
