



## Student Instruction Sheet

### Diagnostic Activity, Unit Two

Suggested Time: 20 minutes

#### **What's important in this lesson:**

It is important for you to work carefully through the questions on this page. These questions have been designed to see what knowledge you already have about the topics that you will cover in the second unit.

#### **Complete the following steps:**

1. Complete all questions provided.
2. If you have any questions, ask your teacher for help.
3. Check your answers with the Answer Key that your teacher has.

#### **Hand in the following:**

1. This Diagnostic activity will be handed in only if your teacher requests it.

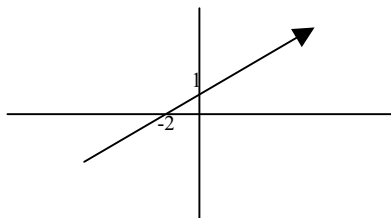
#### **Questions for the teacher:**



## Diagnostic/Introductory Activity Unit 2

1. State the slope of each of the following:    Slope =  $m = \frac{\text{rise}}{\text{run}}$

[a]



[b]  $y = -3x + 7$

[c]

x	y
0	-1
2	-3
4	-5
6	-7

**Hint:** What are the values for the rise and run?

**Hint:** Rise=change in y values and Run=change in x values

$m =$  \_\_\_\_\_

$m =$  \_\_\_\_\_

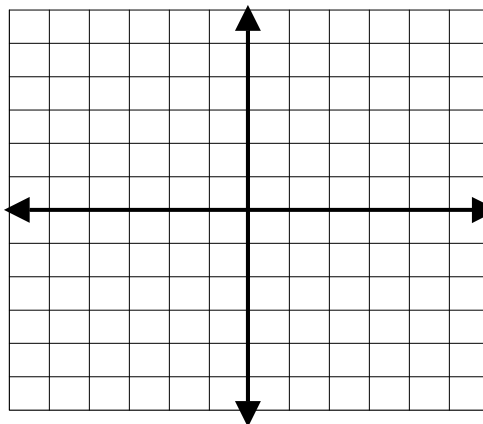
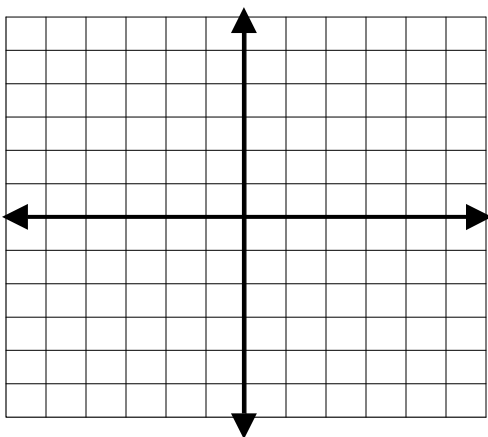
$m =$  \_\_\_\_\_

2. Draw each of the following linear graphs on the axes provided.

[a]

x	y
-1	-2
0	0
1	2
2	4

[b]  $y = \frac{1}{3}x - 2$





## Diagnostic/Introductory Activity: Unit 2

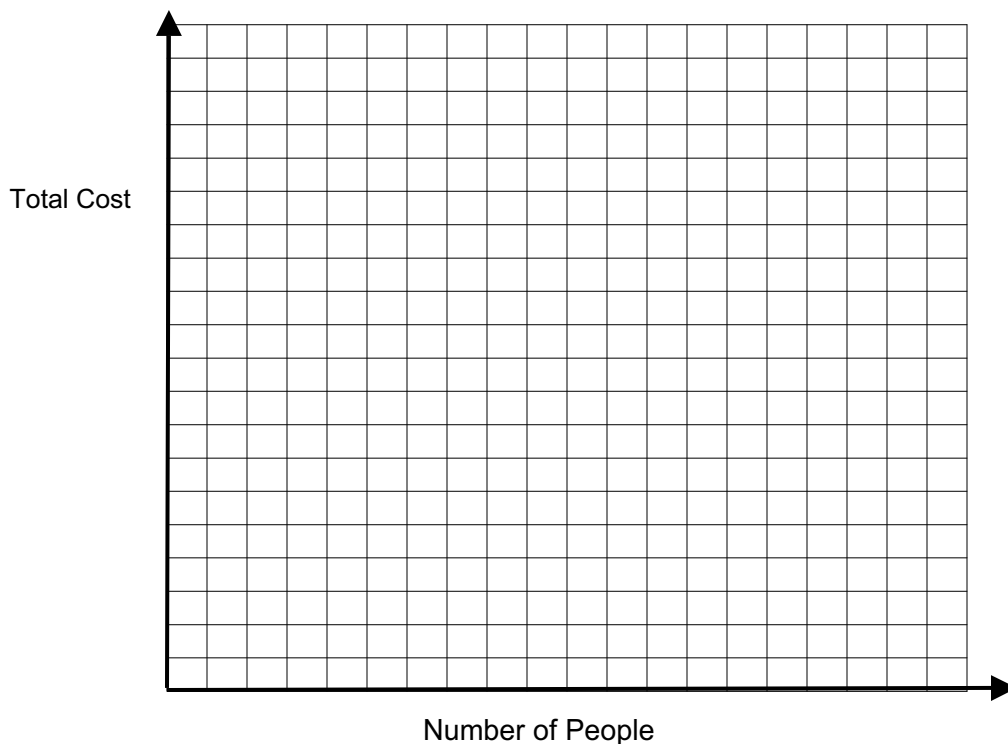
3. A caterer charges \$400 for the rental of a banquet hall, plus \$30 per person for the cost of the meal.

[a] Write the equation for this relation, which gives the Total cost of an event based on the number of people who will attend. Let  $C$  = total cost and  $n$ =number of people

[b] Complete the following table of values.

Number of People	Total Cost
50	
100	
150	
200	

[c] Graph the data. Title the graph.



[d] What is the slope of the line, and what is the meaning of this value?