Name: _____

Worksheet: Linear Situations

1) Napoleon has $40.00 saved up already. To earn more money, he plans to start mowing lawns. He will earn $12.00 for each lawn he mows.

a) Write an equation to represent the situation: _____

b) The inputs (x) represent: _____

c) The outputs (y) represent: _____

d) The slope is ____ and it represents _____

_____

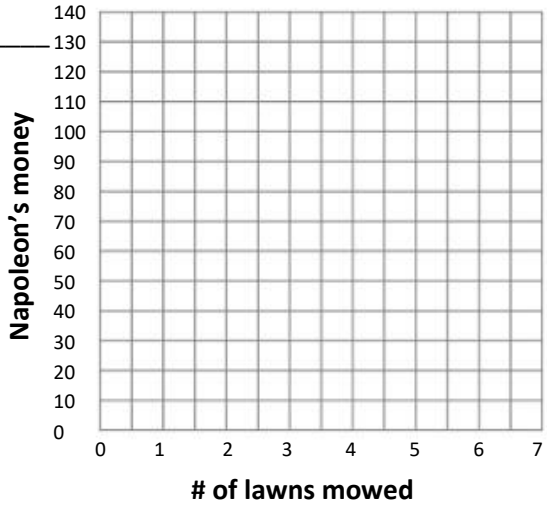
e) The y-intercept is ____ and it represents _____

_____

f) Make a table.

x	y

g) Graph.



h) Should you connect your points? Why or why not?

_____

_____

_____

_____

*****Notice: The y-axis is not scaled by 12's. Nobody scales graphs by 12's. You should always use a "common" number, like 1's, 2's, 5's, 10's, 20's, 100's, etc. You will have to estimate where the points go.*****

2) Napoleon is now mowing one of the lawns. All together, the lawn has an area of 1300 square feet. Napoleon is able to mow 150 square feet of the grass per minute.

a) Write an equation to represent the how many square feet are LEFT unmowed: _____

b) The inputs (x) represent: _____

c) The outputs (y) represent: _____

d) The slope is ____ and it represents _____

_____

e) The y-intercept is ____ and it represents _____

_____

f) Make a table.

x	y

g) Graph. <u>Make sure you label your axes.</u>

h) Should you connect your points? Why or why not?

_____

_____

_____

_____

3) The temperature at 6:00 AM is 35°F. Each hour, the temperature rises by 4°F.

a) Write an equation to represent the situation: _____

b) The inputs (x) represent: _____

c) The outputs (y) represent: _____

d) The slope is ____ and it represents _____

_____

e) The y-intercept is ____ and it represents _____

(continued on back)

f) Make a table.

x	y

g) Graph. Make sure you label your axes.

h) Should you connect your points?
Why or why not?

_____
_____
_____
_____

4) Pedro is making chocolate chip cookies. He has a bag of chocolate chips that contains 250 chocolate chips. He is very particular about his cookies, so he makes sure that there are exactly 7 chocolate chips in each cookie.

a) Write an equation to represent the **number of chocolate chips used**: _____

b) The inputs (x) represent: _____

c) The outputs (y) represent: _____

d) The slope is ____ and it represents _____
_____

e) The y-intercept is ____ and it represents _____
_____

f) Make a table.

x	y

g) Graph. Make sure you label your axes.

h) Should you connect your points?
Why or why not?

_____
_____
_____
_____

5) Use the same situation as #4.

a) Write an equation to represent the **number of chocolate chips left in the bag**: _____

b) The inputs (x) represent: _____

c) The outputs (y) represent: _____

d) The slope is ____ and it represents _____
_____

e) The y-intercept is ____ and it represents _____
_____

f) Make a table.

x	y

g) Graph. Make sure you label your axes.

h) Should you connect your points?
Why or why not?

_____
_____
_____
_____