CCSS Algebra 1 Name_____
Homework U5 Block 6

1. Tell whether each table represents linear, quadratic, exponential, or inverse variation. Justify your reasoning. Then make a graph for each.

a.

x	y
1	-3
2	0
3	5
4	12

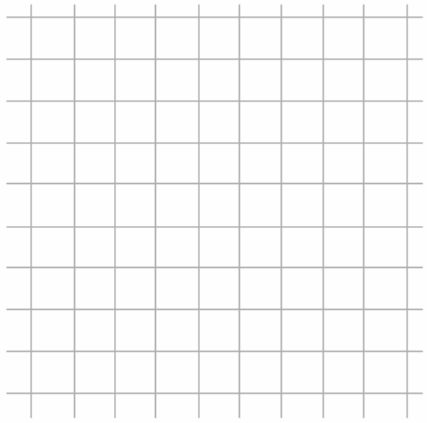
b.

x	y
1	10
2	14
3	18
4	22

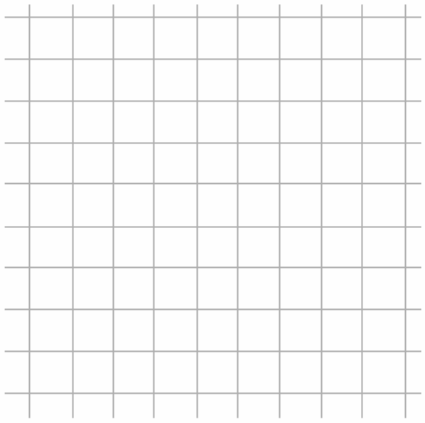
c.

x	y
1	4
2	8
3	16
4	32

a.



b.



c.

d.

x	y
1	12
3	4
4	3
6	2

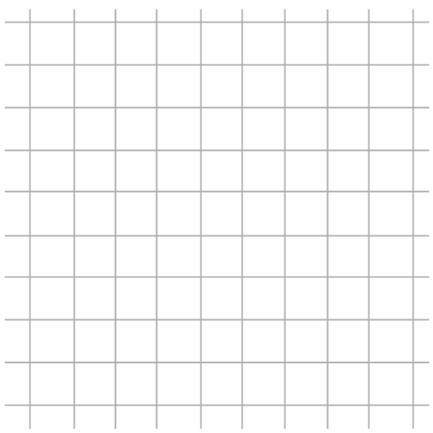
e.

x	y
1	2
3	10
4	17
6	37

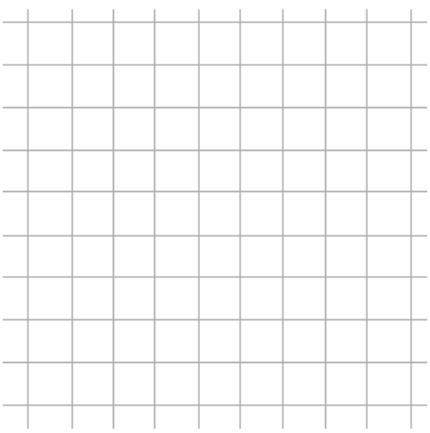
f.

x	y
1	18
3	14
4	12
6	8

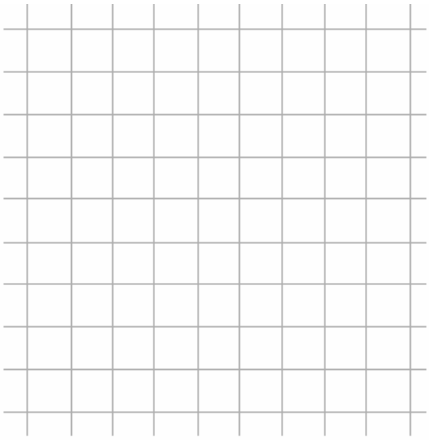
d.



e.

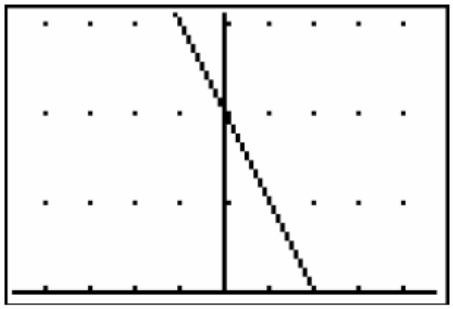


f.

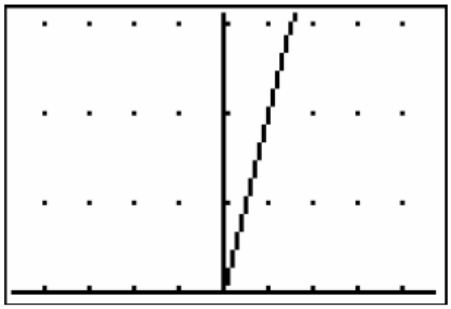


2. You have learned some characteristics of the graphs of different families of functions.
Label each graph as one of the following, and then explain how you identified it.

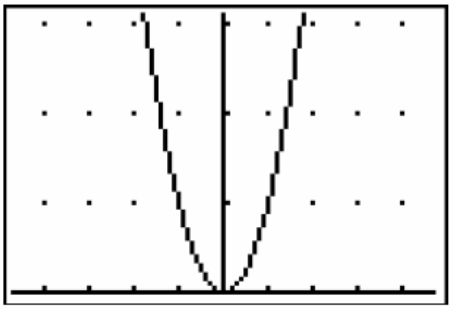
- Proportional relationship
- Nonproportional linear relationship
- Nonconstant rate of change: quadratic
- Nonconstant rate of change: exponential
- None of the above



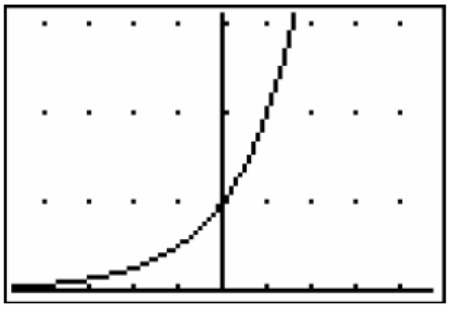
a._____



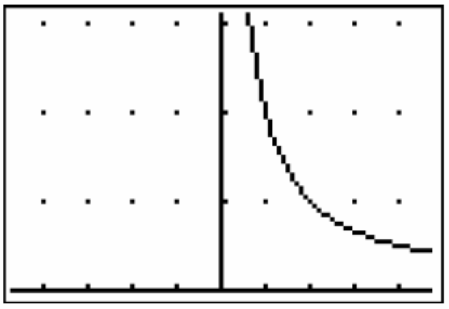
b._____



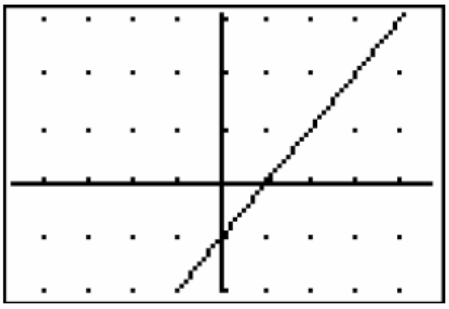
c._____



d._____



e._____



f._____

3. Indicate whether you agree or disagree with each statement. Circle the appropriate word. Then explain your decision.

a. A graph allows you to identify quickly whether a function is linear or nonlinear. Agree / Disagree

Explanation:

b. A graph allows you to distinguish easily between a quadratic or exponential pattern. Agree / Disagree

Explanation: