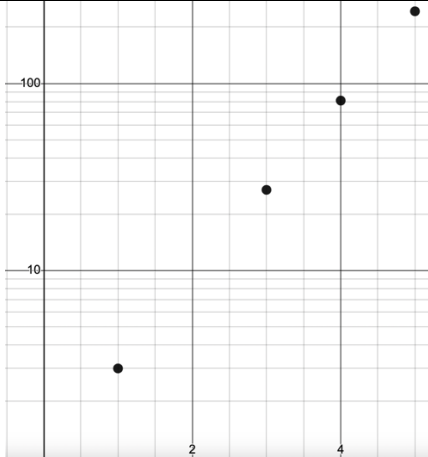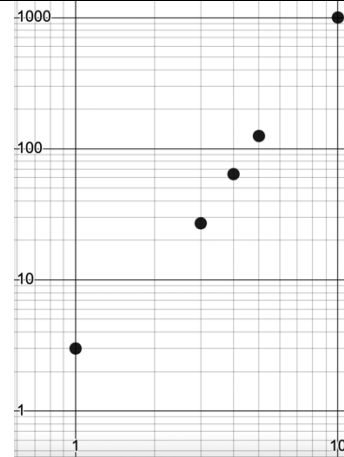Name: _____

CA #1

Instructions: Instructions: Tell which graphs represent exponential functions and which do not. Then explain why.
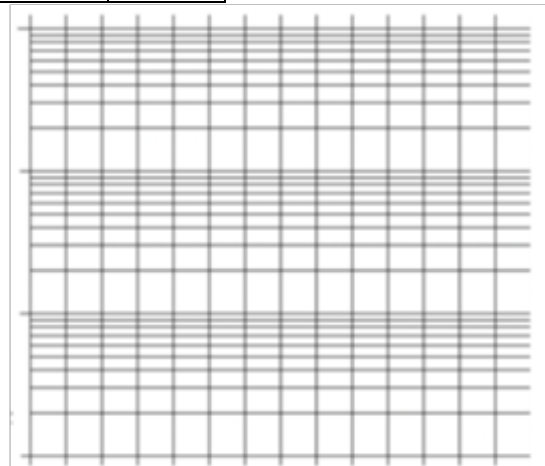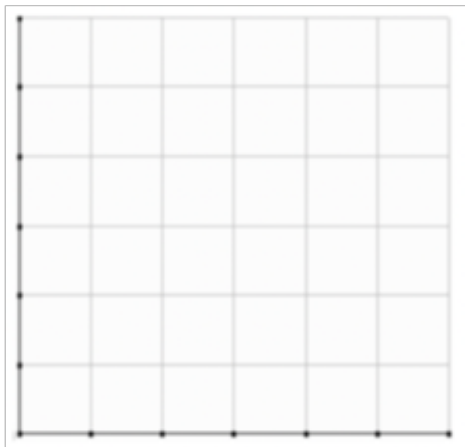
1)

2)

CALCULATOR ACTIVE: Instructions: Answer the questions pertaining to the given data.

3) A) Plot the following data on both graphs below.

X	1	3	4	6	7
Y	3.6	20.74	49.77	286.65	687.97

B) Find a regression equation for the above data.

C) Take the log of both sides and use log rules to create a linear function.

D) Complete the table to find log y.

X	1	3	4	6	7
Y	3.6	20.74	49.77	286.65	687.97
Log y					

E) Find a linear regression equation for (x, log y).

1) Yes , because the semi-log plot shows a linear relationship
2) No because the linear relationship is on a log-log plot.
3) A) graphs should be able to be done, if you need help, please see your teacher.
   B) $f(x) = 1.5(2.4^x)$
   C) $\log y = \log 1.5 + x \cdot \log 2.4$
   D)

X	1	3	4	6	7
Y	3.6	20.74	49.77	286.65	687.97
Log y	0.56	1.32	1.70	2.46	2.84

E) $\log y = 0.38x + 0.176$