Answers may vary

**Practice Quiz for Graphing Stories**

Name: Answers

Try this practice quiz. The real quiz will be next class! Be sure to ask questions if you don't understand something so you feel confident for the quiz!

1) Sketch a graph of the story below. Label both axes with the appropriate variable and make a title for your graph. (You do not need to put specific numbers on the axes.)

Darryl lives on the third floor of his apartment building. His bike is locked up outside on the ground floor. At 3:00 p.m., he leaves to go run errands, but as he is walking down the stairs, he realizes he forgot his wallet. He goes back up the stairs to get it and then leaves again. As he tries to unlock his bike, he realizes that he forgot his keys. One last time, he goes back up the stairs to get his keys. He then unlocks his bike, and he is on his way at 3:10 p.m.

Sketch a graph that depicts Darryl's change in elevation over time.

Darryl's Elevation

Elevation (feet)

Time (minutes)
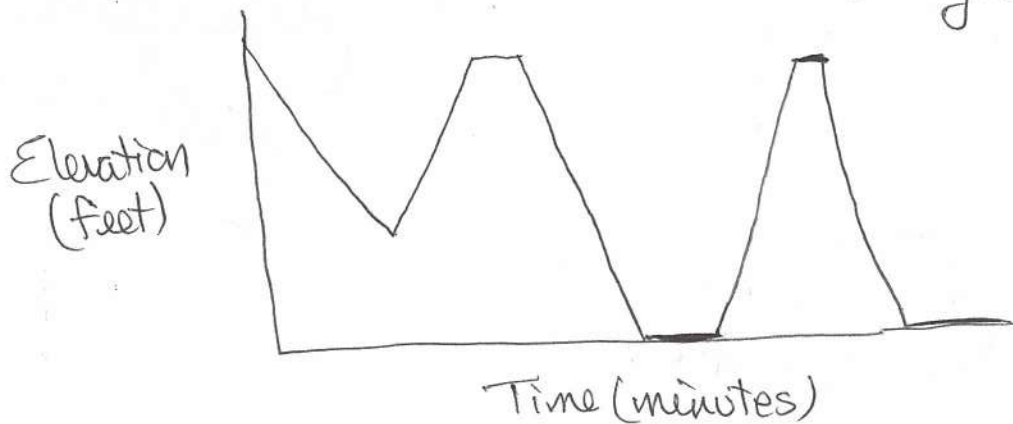
This is a piecewise function

2) A population of ladybugs starts with 10 ladybugs and doubles each week! How many ladybugs would there be at 1 week, 2 weeks, 3 weeks, etc. Make a table showing the number of ladybugs at each week up to 10 weeks. Then make a sketch of a graph that shows the number of ladybugs over time. Be sure to label, label, label! Include a consistent and appropriate scale for your graph.


Ladybug Population

ladybugs

11,000
10,000
9000
8000
7000
6000
5000
4000
3000
2000
1000

time (weeks)

2   4   6   8   10
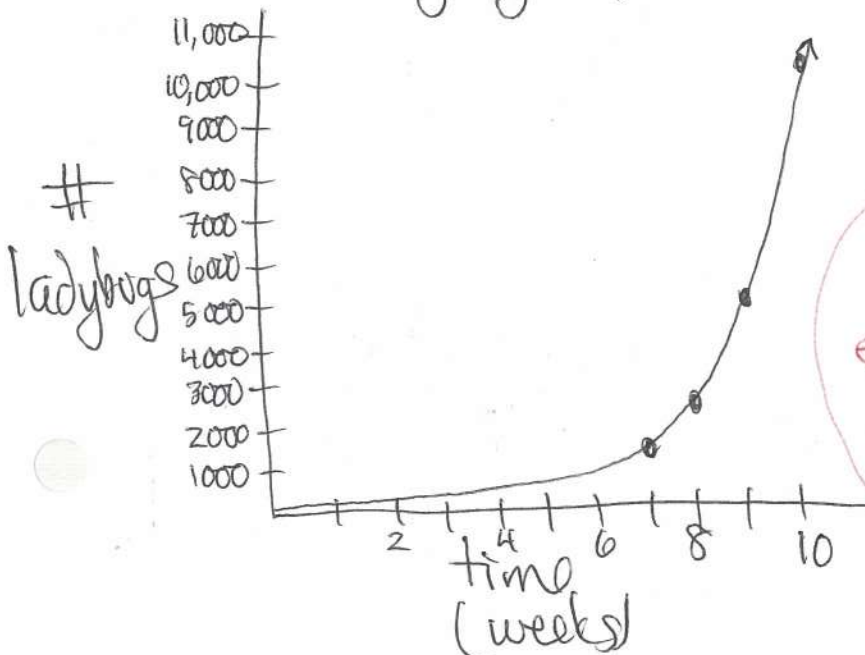
This is an exponential function

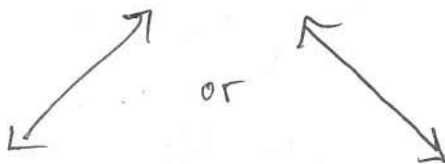| time x	# ladybugs y
0	10
1	20
2	40
3	80
4	160
5	320
6	640
7	1280
8	2560
9	5120
10	10,240

3) Sketch a graph of this story: Kaya throws a ball straight up into the air. The ball goes up and then falls back into Kaya's hand. Draw a sketch of the height of the ball from the ground over time. Label, label, label! Include a reasonable scale for each axis.
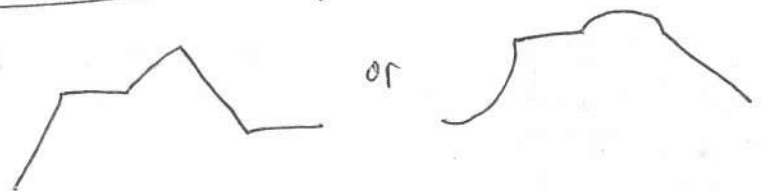

Kaya's Ball Toss
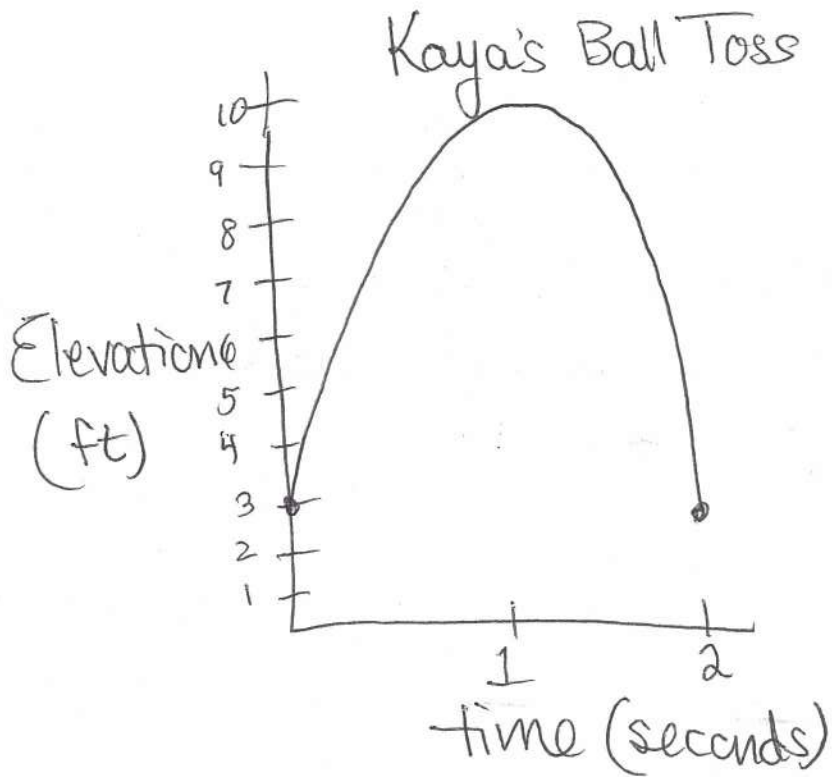
This is an quadratic equation

4) We have talked about four specific types of functions: linear functions, piecewise functions, quadratic functions, and exponential functions. Sketch an example of each type of function below.
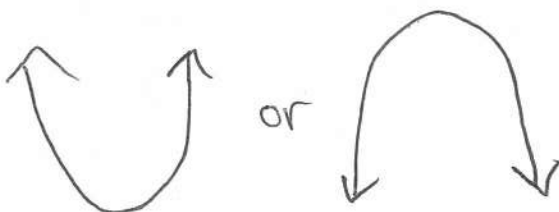

linear   piecewise

or   or

Quadratic   Exponential

or   or