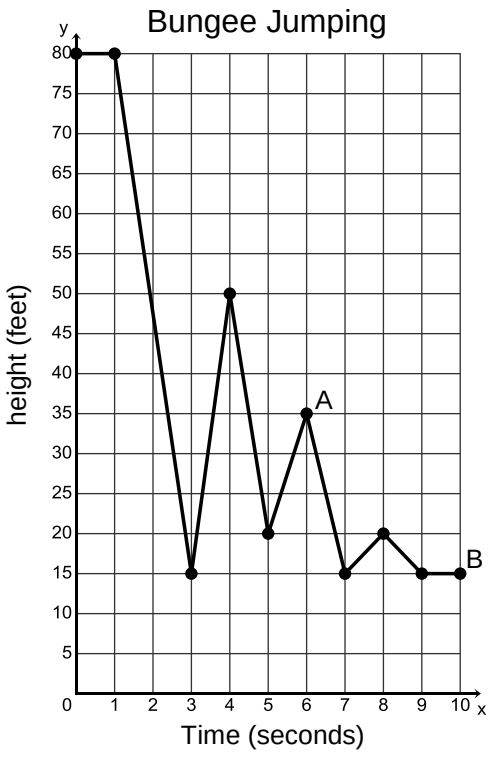
Sec I – Term 3 Name_____ ID: 1

Notes: T3-42 Interpreting Graphs Date_____Period_____

Give the slope for each interval and explain what it represents for the situation.

D: $[0, 1]$	D: $[1, 3]$	D: $[3, 4]$
D: $[4, 5]$		D: $[5, 6]$
D: $[6, 7]$		D: $[7, 8]$
D: $[8, 9]$		D: $[9, 10]$

What is the *y*-intercept and what does it mean?

What is the *x*-intercept and what does it mean?

Name the ordered pair at point A and explain what it means.

Name the ordered pair at point B and explain what it means.

When is the function increasing? When is it decreasing? When is it constant?

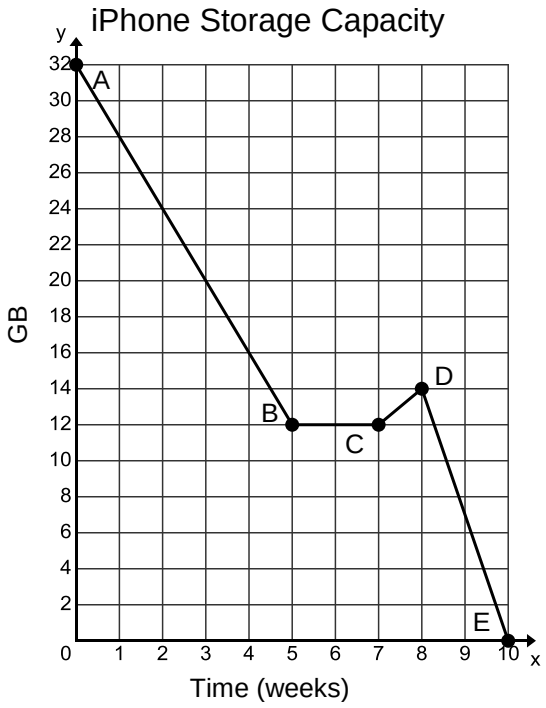
What is the average rate of change for the jump?

For each portion of the graph:

1) state the interval,

2) find the slope, and

3) explain what is going on?



A to B 1) 2)

3)

B to C 1) 2)

3)

C to D 1) 2)

3)

D to E 1) 2)

3)

Draw a graph the represents the time and total distance for the function.

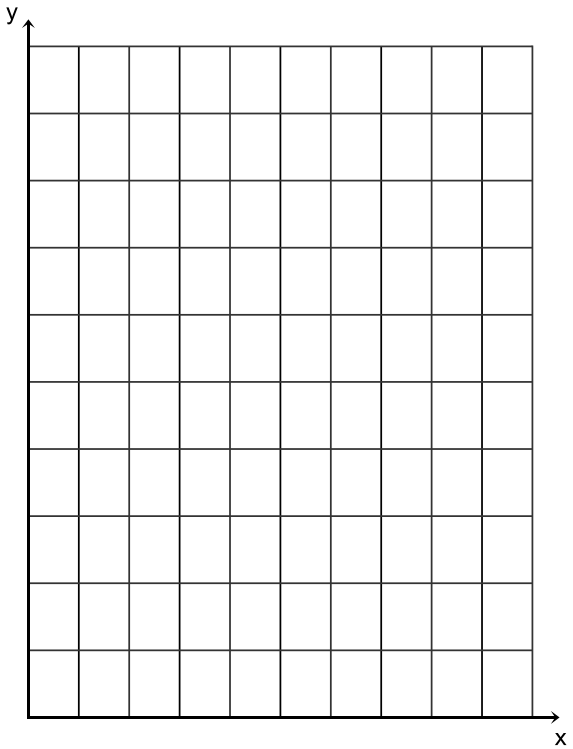
A) You are headed to visit your cousins for the weekend. You start at your house early Friday morning, and drive for 2 hours at an average rate of 60 mph.

B) You stop for 30 minutes to eat breakfast and get gas.

C) You drive another hour at a rate of 45 mph.

D) You run into a giant pot-hole and get a flat tire. It takes 30 minutes to fix the flat.

E) You drive the last hour to your cousins house at a rate of 70 mph.



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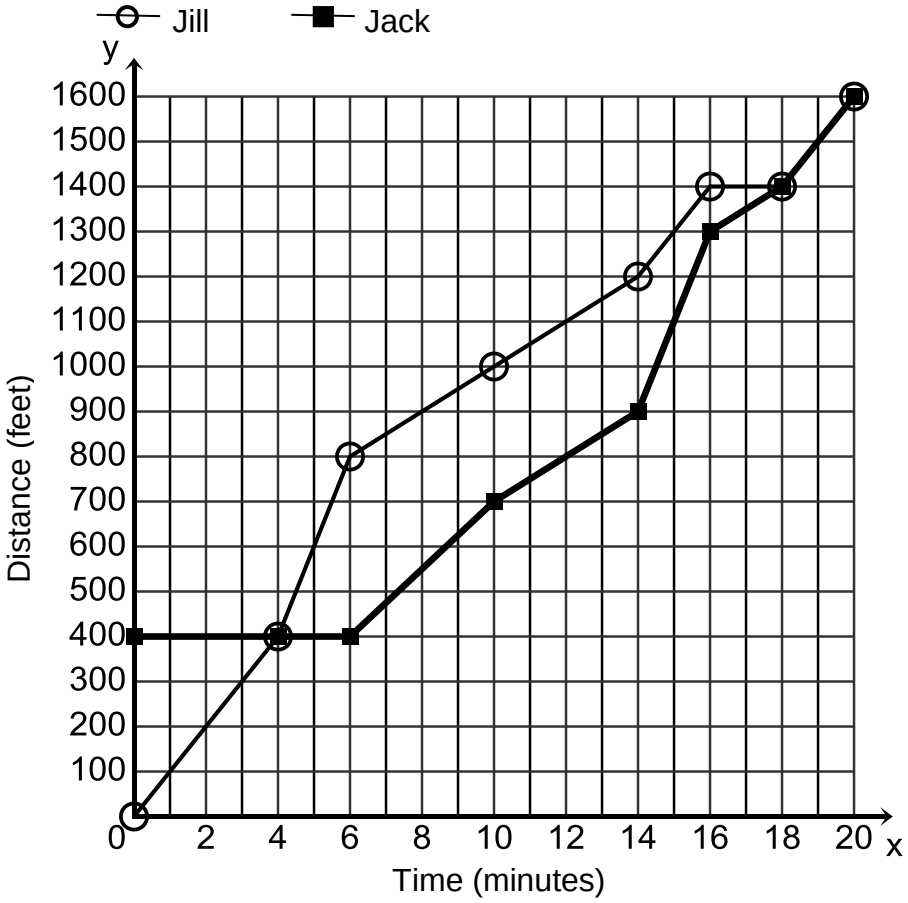
The graph shows Jack and Jill's trip up the hill. Use the graph to answer the following questions.



1. Which is the independent variable and which is the dependent variable?

2. What is the *y*-intercept for Jack and what does it mean?

3. What is the *y*-intercept for Jill and what does it mean?

4. What is the *x*-intercept for Jill and what does it mean?

5. How long does the trip take?

6. What is Jack doing for the domain interval $[0, 6]$?

7. What happens at minute 4?

8. What is happening in the domain interval $[18, 20]$?

9. Where is Jack moving fastest? How do you know?

10. Where is Jill moving fastest? How do you know?

11. What is Jack's speed at the domain interval $[10, 14]$?

12. What is Jill's speed at the domain interval $[6, 10]$?

13. What is Jill doing during the domain interval $[16, 18]$?

14. What is Jill's average speed for the whole trip?

15. What is Jack's average speed for the whole trip?

16. Match the graph with the scenario about raising the school flag.

a) Mr. Jolley uses a motor to raise the school flag at a constant rate.

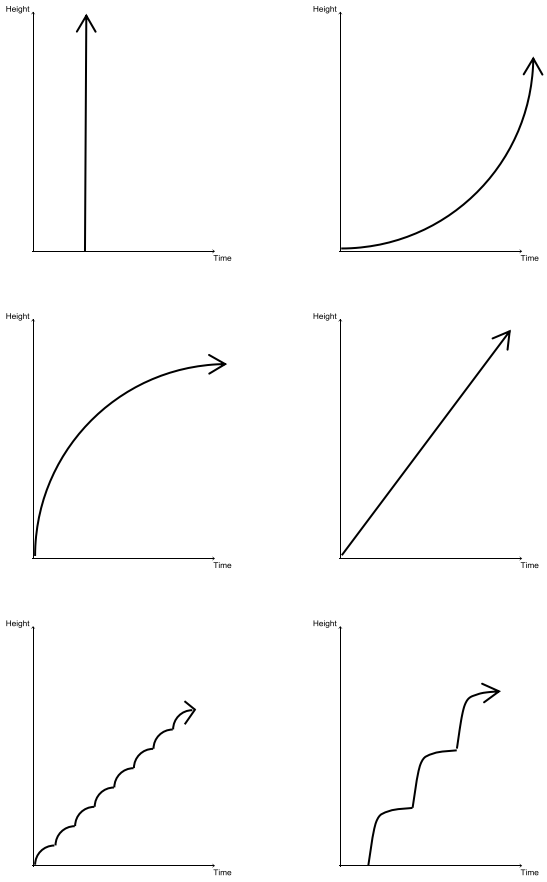
b) The school flag is at the bottom and the top at the same time.

c) Mr. Thomas uses a motor that raises the school flag fast in the beginning and slows near the top.

d) A student waits a second, then jumps up to grab the rope and raise the school flag. Then repeats the process.

e) Mr. Carron-Campbell uses a motor that raises the school flag slow in the beginning and faster near the top.

f) A student raises the school flag by grabbing the rope and pulling down repeatedly.



17. For each portion of the graph:
1) state the interval,
2) find the slope, and
3) explain what is going on?

A to B 1) 2)

3)

B to C 1) 2)

3)

C to D 1) 2)

3)

D to E 1) 2)

3)