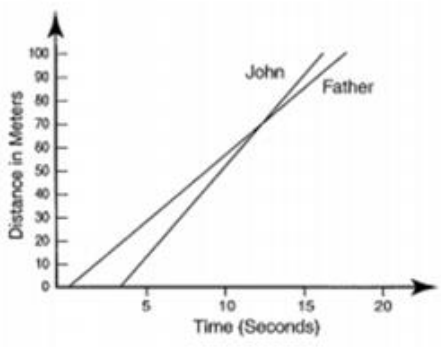
Blizzard Bag #1
8.F.2

Name_____Score_____/16

From Graphs to Stories. *Analyze each graph and answer all the questions asked. All answers should be in complete sentences. There is a blizzard bag introductory video posted to Edmodo that will explain all three assignments in more detail and help you get started.*

1. John and his father participate in a 100-meter race. John started the race 3 seconds after his father began to run. The graph provides information about how far John and his father ran over time.



Helpful hints:

What might account for the small delay before the father starts?

What do the lines crossing mean?

Who wins and by about how much?

A. Describe the race from finish to end (3 points).

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B. If the two lines describing how each person ran were parallel, what would the graph tell you about who won the race (1 point)?

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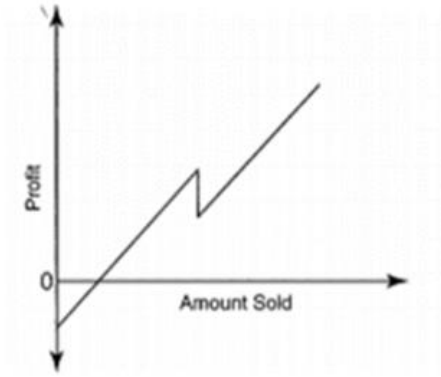
2. The graph represents the relationship between the profit and the amount of lemonade sold at a lemonade stand.



Helpful hints:

Profit is the amount of money made once expenses are covered. Why would the line start below zero?

What does it mean when the line hits zero on the x-axis?

Why does the line take a vertical drop midway?

A. Write a story about how the lemonade stand's profit is determined. Include an explanation for when the line is below zero (3 points).

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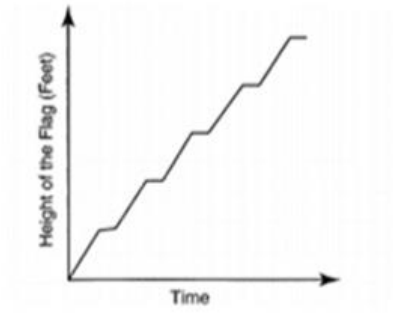
3. The graph represents a flag being raised on a flagpole.



Helpful hints:

Think about raising a flag on a flagpole. What actions cause the tiny pauses in the graph?

Make sure your flagpole height is a reasonable height.

A. Describe what is happening to the flag that explains the shape of the graph (2 points).

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B. Give an estimate of the height of the flagpole in feet. Explain your answer (2 points).

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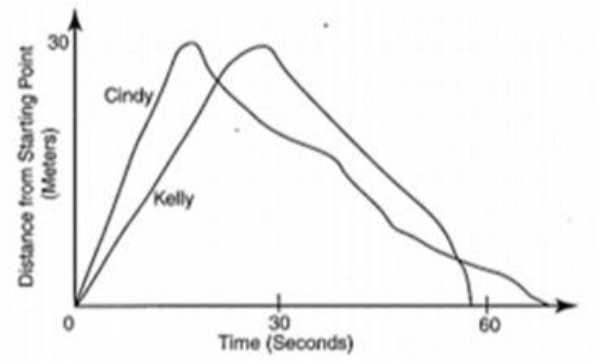
4. Graphs can be used to depict the story of a race. Here is a graph that represents a swimming race that occurred between two middle-grades students. Answer the following questions (1 point each).



For A-D, circle the correct racer

A. Who starts the race at a faster pace? Cindy or Kelly

B. Who makes the turn into the second leg first? Cindy or Kelly

C. Who swims the second leg the most consistently? Cindy or Kelly

D. Who wins the race? Cindy or Kelly

E. About how many seconds separate the first place finisher from the second? _____