WARM-UP...   Speed = Km/hr

Describe the journey for each segment of the graph.

Day Trip from Winnipeg to Winkler, Manitoba

The distance between Winnipeg and Winkler is 130 km.

Start → A: drove 65km in 1 hour
A → B: stopped for 15min
B → C: drove 65km in 45min
C → D: stopped for 2 hours
D → E: Went home 130km in 2 hrs
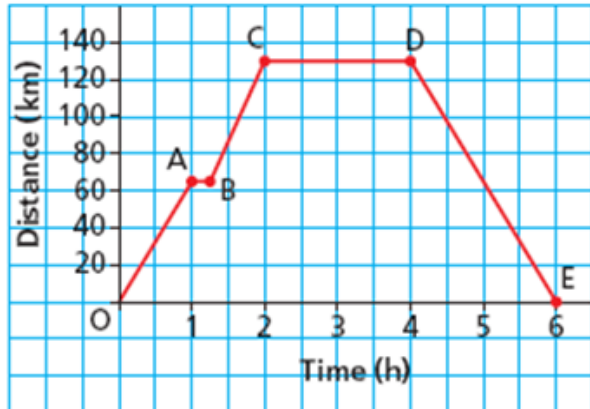
EXAMPLE:

Construct

The Graph!!!

Samuel went on a bicycle ride. He accelerated until he reached a speed of 20 km/h, then he cycled for 30 min at approximately 20 km/h. Samuel arrived at the bottom of a hill, and his speed decreased to approximately 5 km/h for 10 min as he cycled up the hill. He stopped at the top of the hill for 10 min.

Sketch a graph of speed as a function of time. Label each section of the graph, and explain what it represents.

Samuel's Bicycle Ride
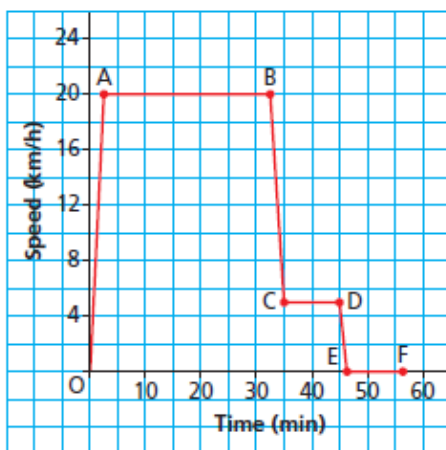
Segment	Journey
OA	Samuel's speed increases from 0 to 20 km/h, so the segment goes up to the right.
AB	Samuel cycles at approximately 20 km/h for 30 min. His speed does not change, so the segment is horizontal.
BC	Samuel's speed decreases to 5 km/h, so the segment goes down to the right.
CD	Samuel cycles uphill at approximately 5 km/h for 10 min. His speed does not change, so the segment is horizontal.
DE	Samuel slows down to 0 km/h, so his speed decreases and the segment goes down to the right.
EF	Samuel remains stopped at 0 km/h for 10 min, so the segment is horizontal.

Based upon the graph below, answer the following question with as many details as you can justify from the graph.

AB: Fill Tub
BC: Cat fell in (unwillingly)
CD: Cat in tub
DE: Cat Climbs out
EF: Picking out cat hair
FG: Fred & Sally got in tub
GH: Bath time

Water depth
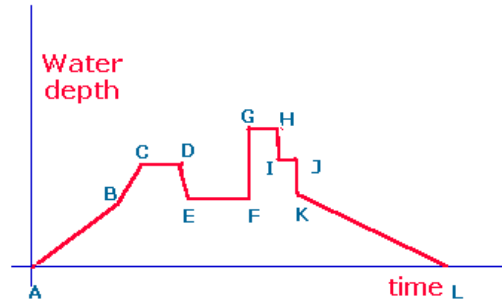
time

Tell the Story...

If the tub is filled during AB, describe what happens in the rest of the segments (BC, CD, etc.).

HI: Fred got wreakly so he got out
IJ: More bath time
JK: Sally got out
KL: Drain the tub; cat hair fall.

Graph Story
8th Grade Open Response Question

THE PROBLEM
Look at the mystery graph given below. Write a story to describe the data shown on the graph.

AMOUNT

DAYS
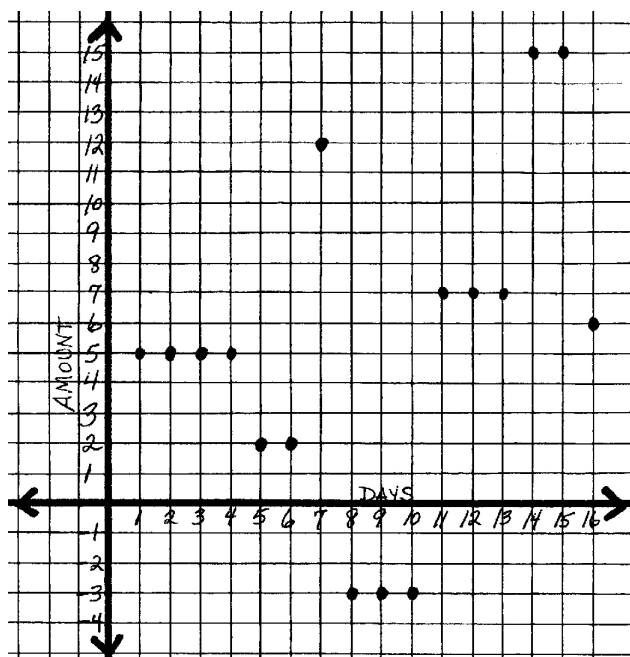
You can make the amount be what ever you would like..be creative!

I will be looking for you to share your story!

Here is what was considered a distinguished response...pretty good for grade 8!!

8th Grade Open Response Question
Distinguished Response

Charlene started the week with no money, but found $5.00 in her coat pocket on Monday. On Friday after school she spent $3.00 for a paperback book, leaving her with a balance of $2.00. On Sunday she earned $10.00 by doing yard work for her neighbor. The balance on Sunday was then $12.00. On day 8, Monday, Charlene's friend, Sharee, called and asked if she wanted to go to the music store to buy the latest 'nSync CD. Since the CD cost $15.00 and Charlene only had $12.00, Sharee offered to loan her the money. Charlene took the loan, which left her with a negative cash balance of $3.00. On day 11, Thursday, Charlene earned another $10.00 by doing yard work and had $7.00 left after paying her $3.00 debt to Sharee. On day 14, Sunday, Charlene earned another $8.00, giving her a new cash balance of $15.00. On day 16, Tuesday, Charlene went to the mall with Sharee and spent $9.00 for a sparkly pen and writing notebook. Her final cash balance on day 16 was $6.00.

PRACTICE PROBLEMS: p. 281 #7 - 10, #13 - 15

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16.

a) dist from ground

time

b) Speed