

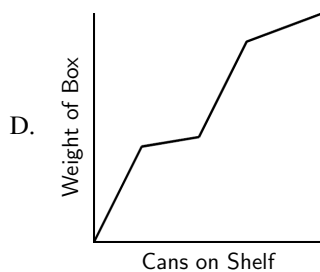
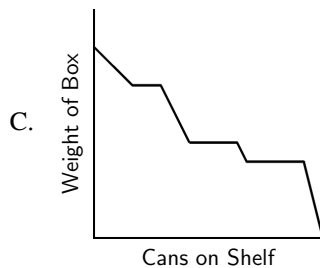
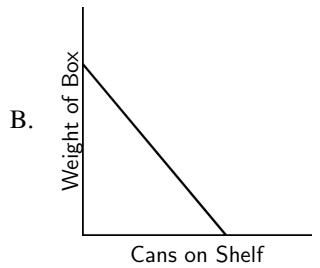
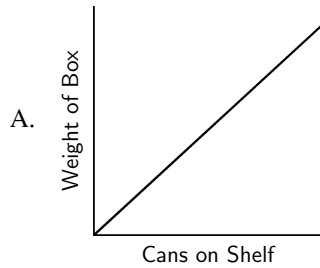
Graphs of Physical phen

Name: _____

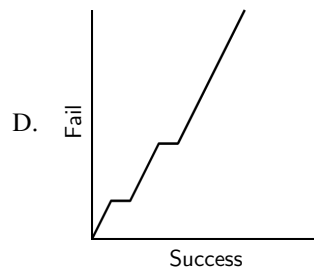
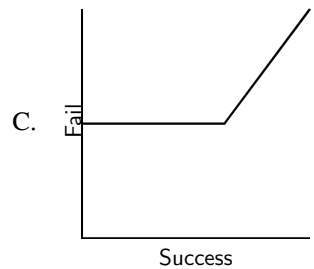
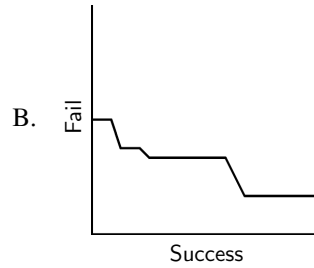
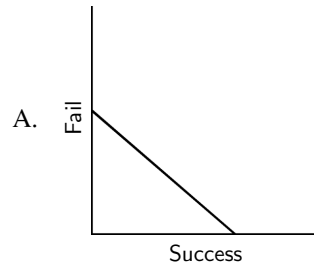
Date: _____

1. Ralpie works in a small drugstore. As he removed cans of bug spray from a box, he stacked the cans on a shelf. During the process, he sometimes stopped to help customers find items.

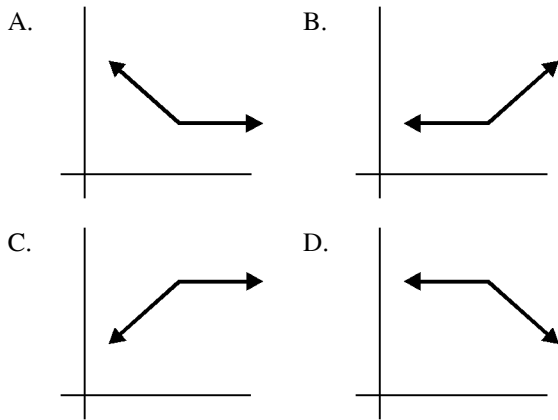
Which of the following graphs best represents Ralpie as he unpacks the box of bug spray?



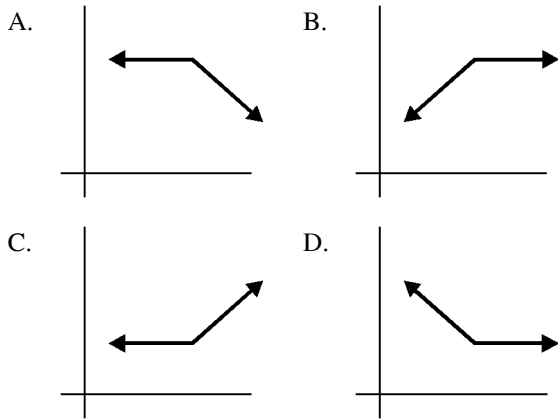
2. Simone shot free throws at the after-school program. She kept track of her progress and saw that once she achieved some success she stayed at the same level before there was more improvement. Over time, she improved to the point that her failure/success ratio continued to improve.



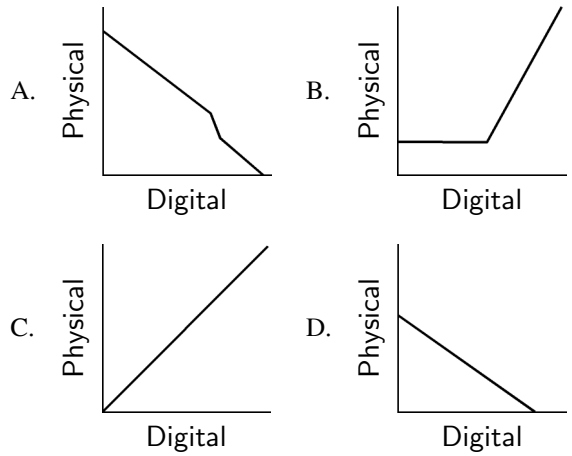
3. In the first half of the 1990s, the average price of a new personal computer did not change much. Then, in the second half, the average price declined steadily. Which graph could be used to illustrate this relationship?



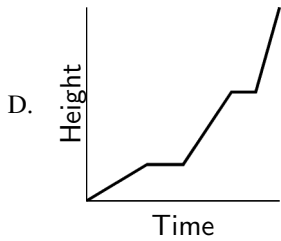
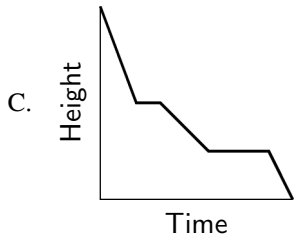
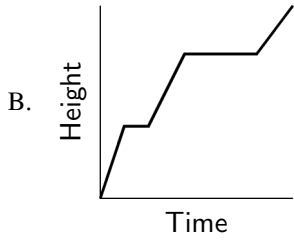
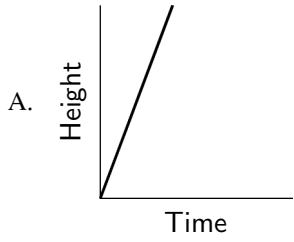
4. In a study on dairy prices, it was found that the price of a gallon of milk went up for several years, then stayed constant for just about as long. Which graph could be used to illustrate this relationship?



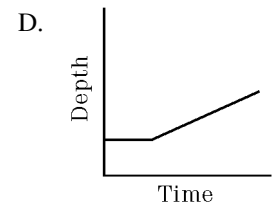
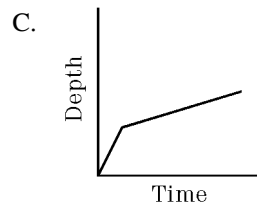
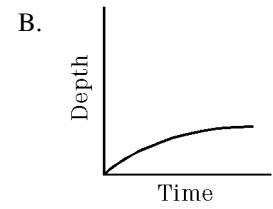
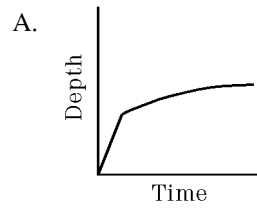
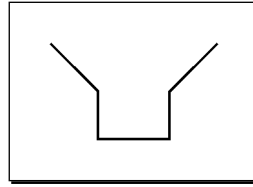
5. From the mid-2000s, physical music sales declined at a greater rate than the rate at which digital music sales increased. In 2011 the decline was even steeper. Which graph illustrates the relationship?



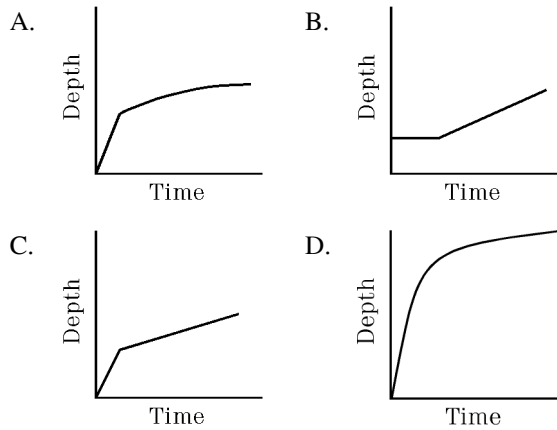
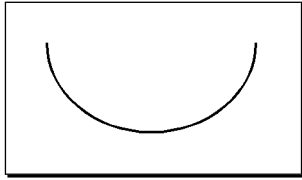
6. At first, a hiker climbed at a brisk pace. He took a break, climbed at a slower pace, then took a longer break. The last part of the climb was his slowest. Which graph illustrates the relationship?



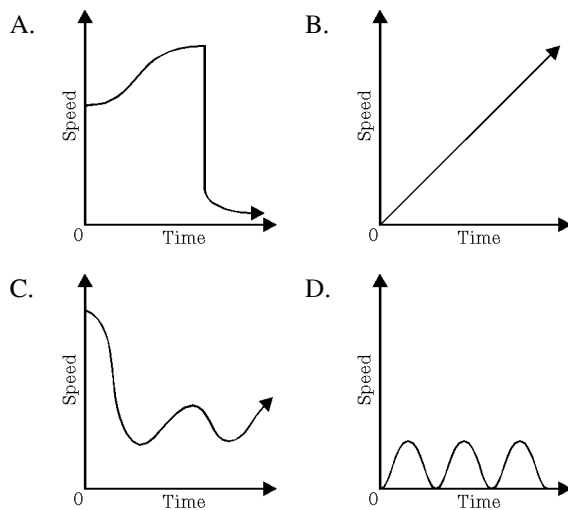
7. The figure shows a cross-section of a swimming pool. The pool is being filled at a steady rate of 10 gal per minute. Which graph shows the water level as a function of time?



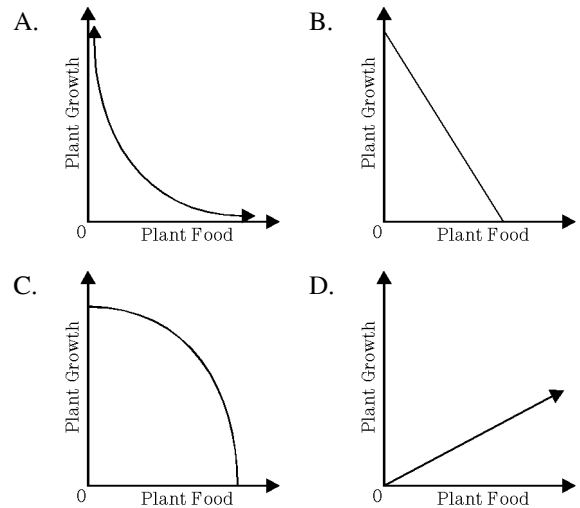
8. The figure shows a cross-section of a swimming pool. The pool is being filled at a steady rate of 10 gal per minute. Which graph shows the water level as a function of time?



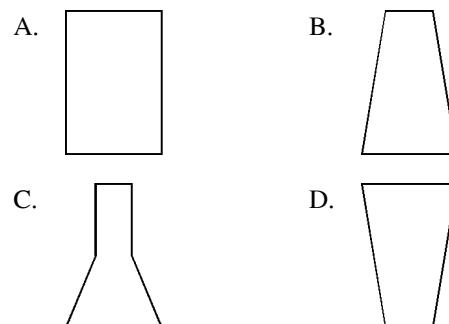
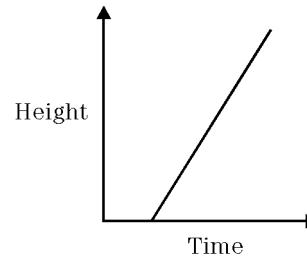
9. Which of the following graphs *best* represents the speed of a car in stop-and-go traffic from the time it leaves a parking place to the time it pulls in at its destination point?



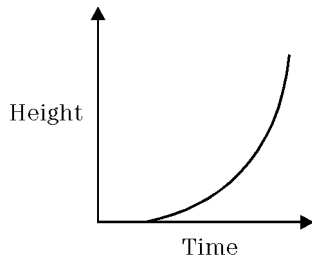
10. Mrs. Crigler's biology class did an experiment to see if plant food would actually have a positive effect on a plant's growth. Which of the following would be the *best* representation of the results of their experiment?



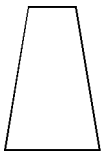
11. The graph shows how the height of a container being filled with water changes over time. Which of the following containers being filled could it graphically be representing?



12. The graph shows how the height of a container being filled with water changes over time. Which of the following containers being filled could it graphically be representing?



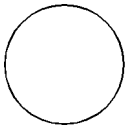
A.



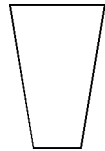
B.



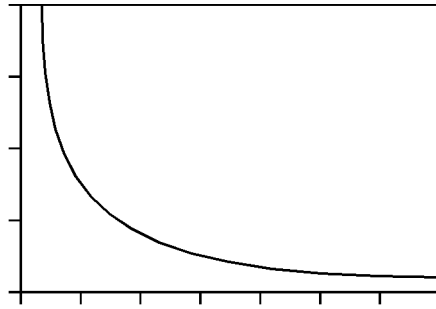
C.



D.

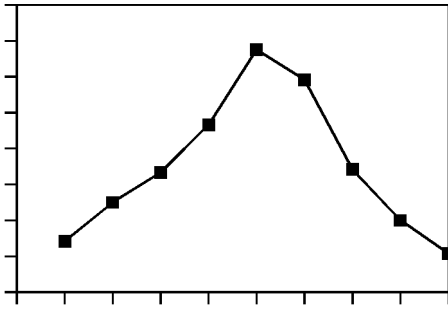


13. Which of the following scenarios best describes the graph?



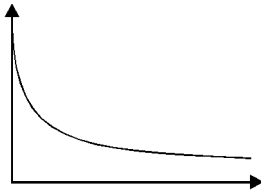
- A. The cost of a long distance call is 50¢ for the first 3 minutes, then drops to 10¢ for each additional 3 minutes.
- B. The cost of oranges at the grocery store compared to the number of pounds.
- C. The speed of a ferry boat as it enters the harbor and approaches the ferry terminal.
- D. The distance driven by a car driving at a constant speed compared to the time of travel.

14. Which of the following scenarios best describes the graph?



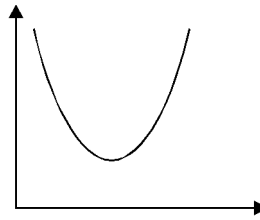
- A. The cost of a long distance call is 50¢ for the first 3 minutes, then drops to 10¢ for each additional 3 minutes.
- B. The speed of a model rocket after it leaves the launch pad, up until the parachute comes out.
- C. The change in temperature from 6 am to 10 pm during a summer day
- D. The distance driven by a car driving at a constant speed compared to the time of travel.

15. Which of the following relations could the graph represent?



- A. how the temperature of a cup of coffee changes as time passes
- B. how the breaking distance of a car depends on its speed
- C. how the length of a tree's shadow changes from dawn to dusk
- D. the distance you can see as time passes on a ferris wheel ride

16. Which of the following relations could the graph represent?



- A. how the breaking distance of a car depends on its speed
- B. how the length of a tree's shadow changes from dawn to dusk
- C. how the visibility of a lighthouse beam depends on the height of the lighthouse
- D. the height of a football after it has been kicked

17. Sketch a graph to represent the situation. Label the axes of the graph.

A dog walks at a constant speed for 20 minutes.

Then the dog's speed increases and she runs at a constant rate for 10 minutes.

Finally, the dog slows down and walks at a constant speed.

18. Sketch a graph to represent the situation. Label the axes of the graph.

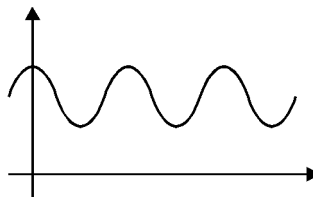
Pete leaves home and walks 6 blocks to the beach.

He stays at the beach all day.

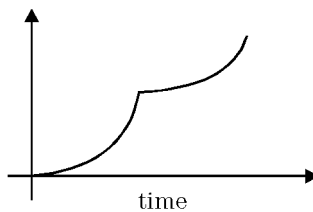
Then Pete walks 2 blocks farther than the beach to buy a soft serve ice cream cone.

Finally, Pete walks back home.

19. Make up a situation that the graph could be describing.



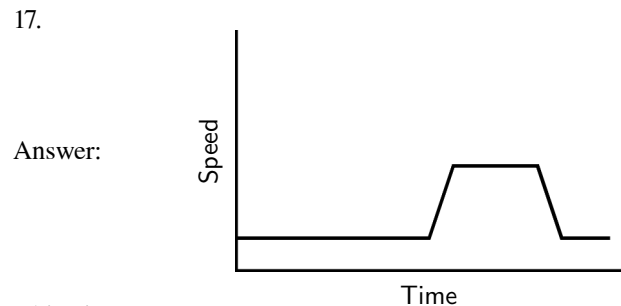
20. Make up a situation that the graph could be describing.



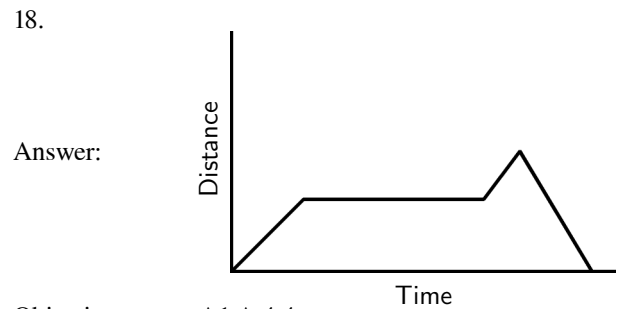
Graphs of Physical phen 4/2/2020

1.
Answer: C
Objective: A1.A.4.4
Points: 1
2.
Answer: B
Objective: A1.A.4.4
Points: 1
3.
Answer: D
Objective: A1.A.4.4
Points: 1
4.
Answer: B
Objective: A1.A.4.4
Points: 1
5.
Answer: A
Objective: A1.A.4.4
Points: 1
6.
Answer: B
Objective: A1.A.4.4
Points: 1
7.
Answer: A
Objective: A1.A.4.4
Points: 1
8.
Answer: D
Objective: A1.A.4.4
Points: 1
9.
Answer: D
Objective: A1.A.4.4
Points: 1
10.
Answer: D
Objective: A1.A.4.4
Points: 1
11.
Answer: A
Objective: A1.A.4.4
Points: 1

12.
Answer: A
Objective: A1.A.4.4
Points: 1
13.
Answer: C
Objective: A1.A.4.4
Points: 1
14.
Answer: C
Objective: A1.A.4.4
Points: 1
15.
Answer: A
Objective: A1.A.4.4
Points: 1
16.
Answer: B
Objective: A1.A.4.4
Points: 1



- Objective: A1.A.4.4
Points: 1



- Objective: A1.A.4.4
Points: 1

19.
Answer: [answers vary]
Objective: A1.A.4.4
Points: 1

20.
Answer: [answers vary]
Objective: A1.A.4.4
Points: 1
