

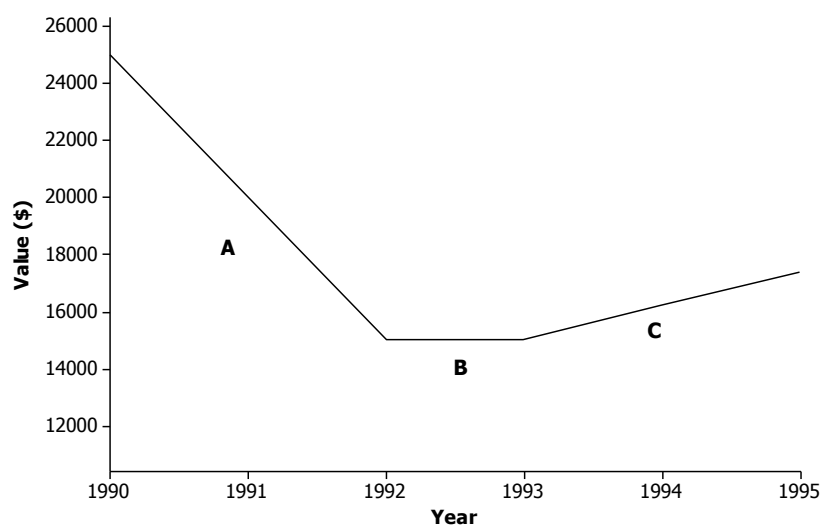
Name _____

Date _____

Lesson 4: Increasing and Decreasing Functions

Exit Ticket

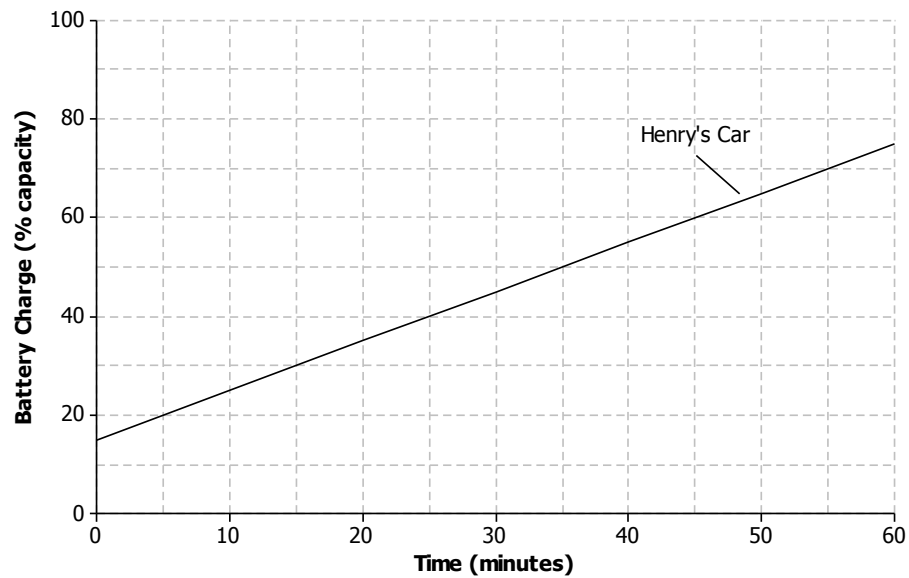
1. The graph below shows the relationship between a car's value and time.



Match each part of the graph (A–C) to its verbal description. Explain the reasoning behind your choice.

- i. The value of the car holds steady due to a positive consumer report on the same model.
- ii. There is a shortage of used cars on the market and the value of the car rises at a constant rate.
- iii. The value of the car depreciates at a constant rate.

2. Henry and Roxy both drive electric cars that need to be recharged before use. Henry uses a standard charger at his home to recharge his car. The graph below represents the relationship between the battery charge and the amount of time it has been connected to the power source for Henry's car.



- a. Describe how Henry's car battery is being recharged with respect to time.
- b. Roxy has a supercharger at her home that can charge about half of the battery in 20 minutes. There is no remaining charge left when she begins recharging the battery. Sketch a graph that represents the relationship between the battery charge and the amount of time on the axes above.
- c. Which person's car will be recharged to full capacity first? Explain.