

Name _____

Date _____

Lesson 2: Interpreting Rate of Change and Initial Value

Exit Ticket

In 2008, a collector of sports memorabilia purchased 5 specific baseball cards as an investment. Let y represent the card's resale value (in dollars) and x represent the number of years since purchase. Each of the cards' resale values after 0, 1, 2, 3, and 4 years could be modeled by linear equations as follows:

Card A: $y = 5 - 0.7x$

Card B: $y = 4 + 2.6x$

Card C: $y = 10 + 0.9x$

Card D: $y = 10 - 1.1x$

Card E: $y = 8 + 0.25x$

1. Which card(s) are decreasing in value each year? How can you tell?
2. Which card(s) had the greatest initial values at purchase (at 0 years)?
3. Which card(s) is increasing in value the fastest from year to year? How can you tell?
4. If you were to graph the equations of the resale values of Card B and Card C, which card's graph line would be steeper? Explain.
5. Write a sentence explaining the "0.9" value in the "Card C" equation.