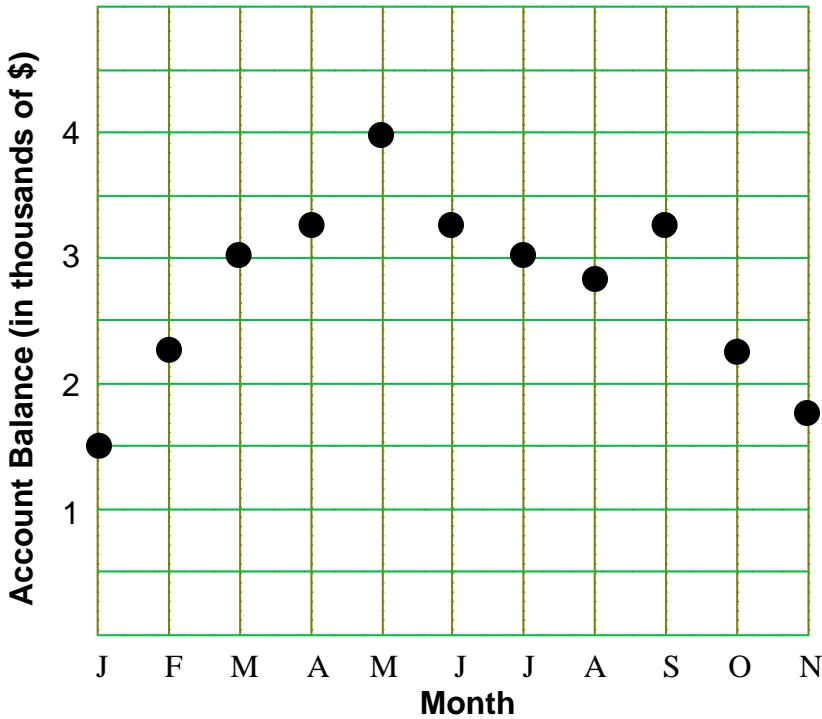


ANALYZING GRAPHS OF FUNCTIONS – Day 2

The graph below shows Devin’s account balance at the end of each month, from January to November of last year.



1. What does the ordered pair (F, 2250) represent for this situation?

2. What is Devin’s account balance at the end of March? _____

3. When is her balance approximately \$2800? _____

4. *Circle one:* Discrete or Continuous

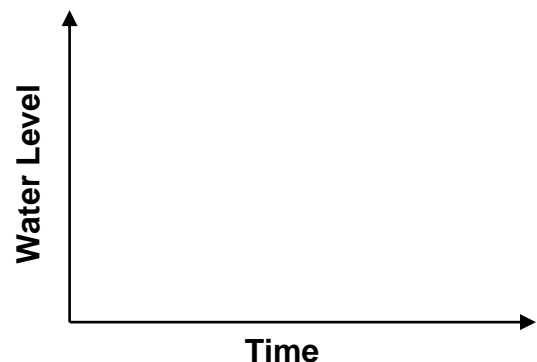
5. On what domain is Devin’s account balance less than \$2500?

6. _____ Which of the following conclusions is **not** true?

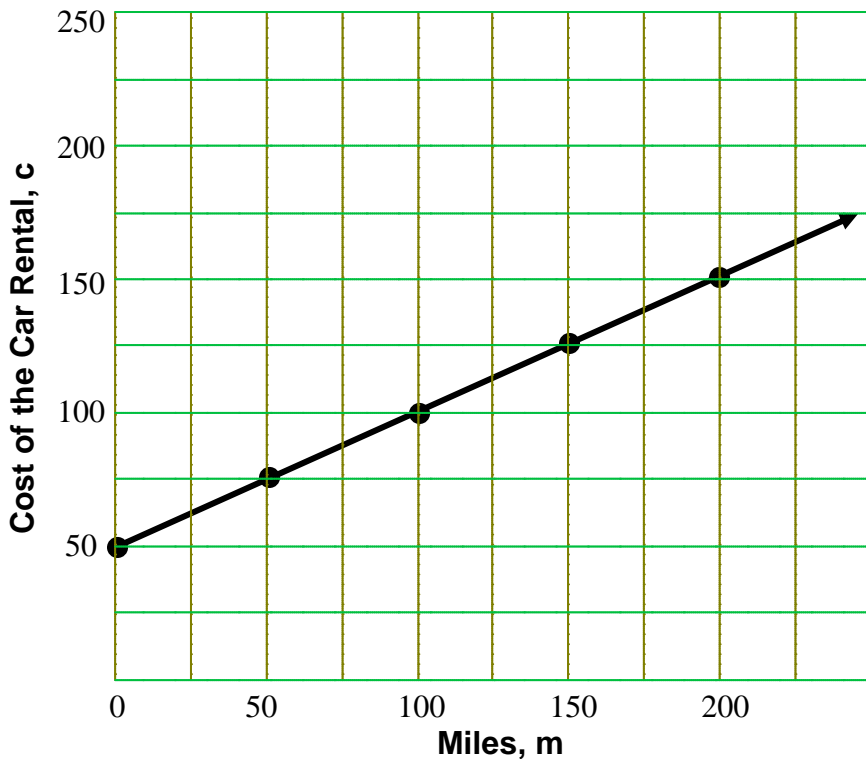
- A. Devin’s account balance was at its highest at the end of May.
- B. Devin’s end-of-the-month account balance increased by about \$2500 from January to May.
- C. Devin’s balance at the end of November is less than the balance at the end of January.
- D. Devin’s account balance appears to be the same at the end of February and October.

Emily is filling an empty pitcher with water from a faucet. The water level increases rapidly at first, but when Emily’s sister walks in, she turns off the faucet to talk for a minute. Emily turns the faucet back on and continues filling the pitcher at a slower rate than before.

- 7. Sketch a graph for this situation.
- 8. *Circle one:* Discrete or Continuous



Rick rents a car for one day for \$50 plus \$0.50 per mile. The graph below describes the cost of the car rental.



9. How much does it cost to rent the car for 150 miles? _____
10. If the cost of the rental is \$75, how far did Rick drive? _____
11. Find the value of $c(0)$. _____
12. If $c(m) = 125$, then $m =$ _____
13. *Circle one:* Discrete or Continuous
14. If Rick only has \$150 to spend, what domain and range describe this situation?

Domain: _____

Range: _____

Esther is in charge of ordering food for her family's reunion. She contacts Mo's Catering and finds that they charge a \$20 delivery fee and \$7.75 per person. The total cost of having the meal catered by Mo's can be found using the function $y = 7.75x + 20$.

15. _____ What does the variable x represent in this situation?

- A. The number of people to be served
- B. The total cost of the meal
- C. The delivery fee
- D. The cost per person

16. Esther expects between 20 and 30 people will come to the reunion.

_____ Which of the following represents the domain of this situation?

- A. $175 \leq x \leq 252.50$
- B. The set of all integers between 175 and 252
- C. $20 \leq x \leq 30$
- D. The set of all integers between 20 and 30

_____ Which of the following is not an element of the range for this situation?

- | | |
|-----------|-----------|
| A. 175 | C. 206 |
| B. 229.25 | D. 225.38 |

17. What is the cost of serving 45 people? _____

18. If the total cost of catering is \$237, how many people were served? _____

19. The function for this situation can be rewritten as $C(p) = 7.75p + 20$, where C represents the cost, and p represents the number of people served.

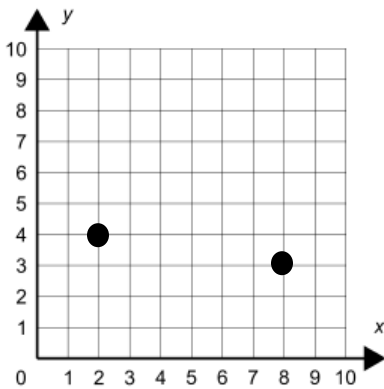
Find the value of $C(50)$ _____

If $C(p) = 500.5$, the $p =$ _____

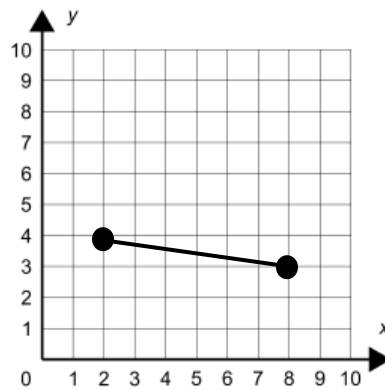
20. What does the ordered pair (16, 144) mean for this function?

Match each graph to the correct domain.

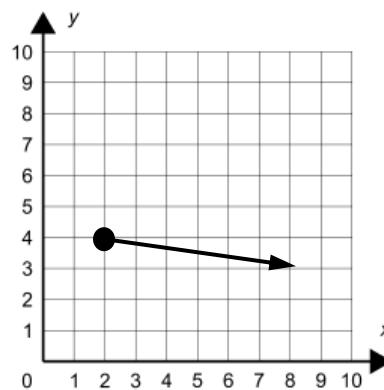
21. _____



22. _____



23. _____



Domain:

A. $x \geq 2$

B. $\{2, 8\}$

C. $2 \leq x \leq 8$