Name: _____ Period: _____

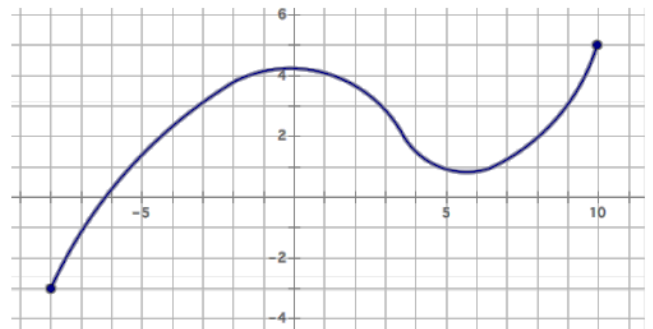## HW 2-7 HONORS: Average Rate of Change

Use the given graph or table to identify the average rate of change on the given interval.

1. Average rate of change on the interval $[5,9]$.
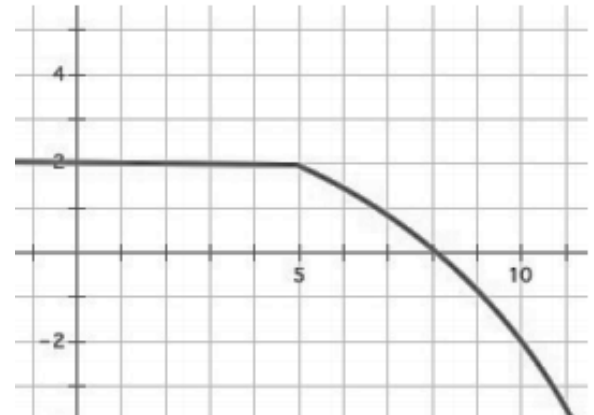
2. Average rate of change on the interval $[4,7]$.

3. Average rate of change on the interval $[-8,-3]$.

4. Average rate of change on the interval $[3,10]$.

5. Average rate of change on the interval $[8,10]$.

x	$f(x)$
0	2
1	− 3
2	0
3	2
4	6
5	12
6	20

x	$f(x)$
1	4
2	10
3	5
4	8
5	3

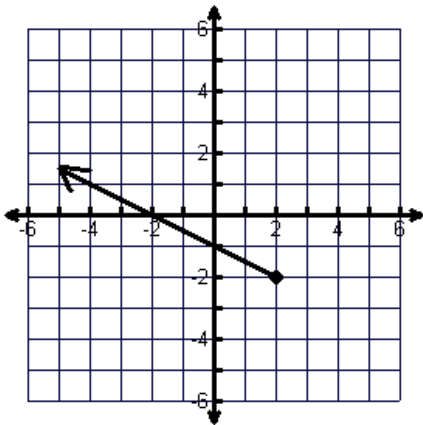| n	$f(n)$
6	23
7	19
8	15
9	11

6. Average rate of change on the interval $[1,4]$.

7. Average rate of change on the interval $[2,4]$.

8. Average rate of change on the interval $[7,8]$.

Answer the following problems using INTERVAL NOTATION.

9. Is the graph below a function? _____ Why?_____

Domain: _____ Range: _____

Continuity: (circle your answer) Continuous, Non-Continuous, or Discrete?

Increasing: _____ Decreasing: _____

minimum: _____ maximum: _____

Positive: _____ Negative: _____
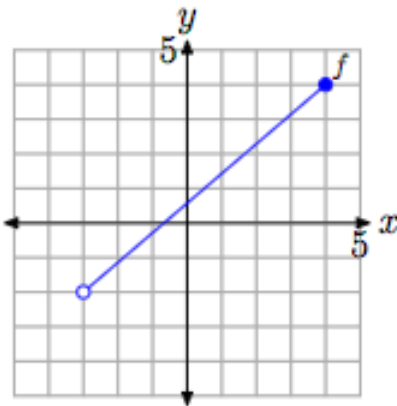
x-intercept: _____ y-intercept: _____

Use the graph above to answer the following:

10. $f(4) =$ _____

11. Find x such that $f(x) = 0$; $x =$ _____

12. Is the graph below a function? _____ Why?_____

Domain: _____ Range: _____

Continuity: (circle your answer) Continuous, Non-Continuous, or Discrete?

Increasing: _____ Decreasing: _____
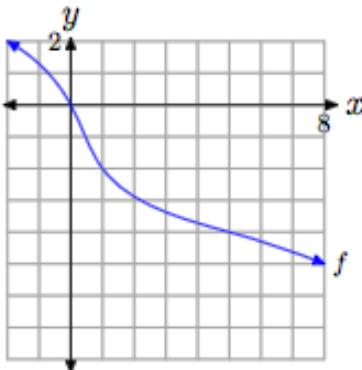
minimum: _____ maximum: _____

Positive: _____ Negative: _____

x-intercept: _____ y-intercept: _____

13. Is the graph below a function? _____ Why?_____

Domain: _____ Range: _____

Continuity: (circle your answer) Continuous, Non-Continuous, or Discrete?

Increasing: _____ Decreasing: _____

minimum: _____ maximum: _____

Positive: _____ Negative: _____

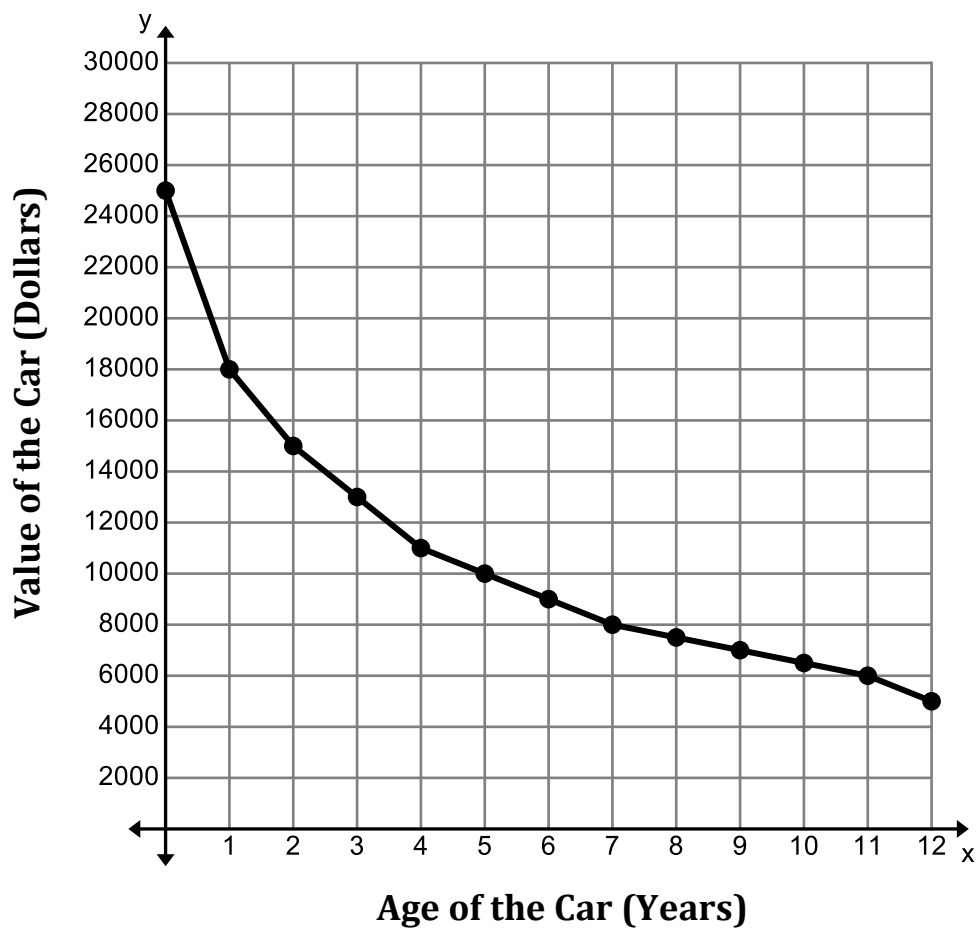x-intercept: _____ y-intercept: _____

Use the graph above to answer the following:

14. $f(1) =$ _____

15. Find x such that $f(x) = -3$; $x =$ _____

16. $f(5) =$ _____

The graph below shows value of a car after purchase.

Age of the Car (Years)

17. What is the average change for the value of the car over the interval $[4,7]$?

18. What is the average change for the value of the car over the interval of $[0,12]$?