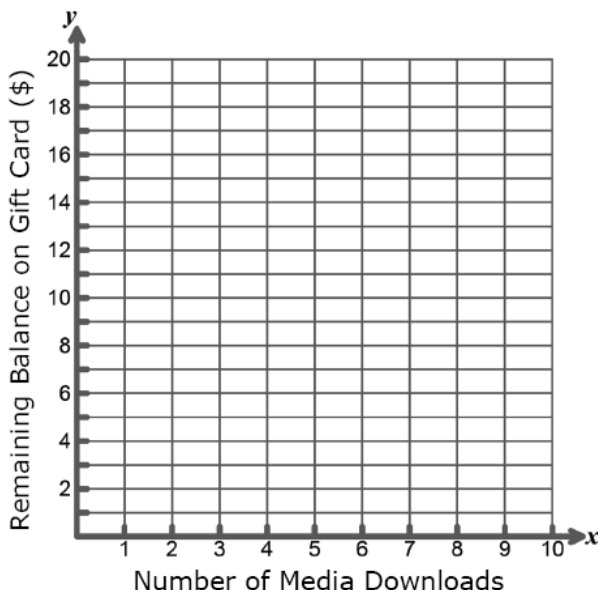


Name _____

MAKING CONNECTIONS: FUNCTIONS

Zoey received a gift card for \$20 worth of media downloads. The cost of each download is \$2.50. Complete each representation for this scenario below.

Number of Downloads, x	Remaining Balance on the Gift Card, y
0	
1	
2	
3	
4	
5	
6	
7	
8	



1. Domain: _____

Range: _____

2. The independent quantity is _____

The dependent quantity is _____

_____ depends on _____.

3. Write a function to represent the relationship between "b", the remaining balance on the gift card and "d" the number of downloads .

4. What value represents the rate of change? _____

Meaning of the rate of change _____

5. What value represents the y-intercept? _____

Meaning of the y-intercept _____

6. When will Zoey have no more money left on her gift card? _____

7. When is half of the gift card spent? _____

8. Suppose the value of the gift card was changed to \$30.

How would this change the equation? _____

New Function: _____

Effects on the graph: _____

In this situation, Zoey can afford _____ downloads.

9. Suppose the value of the gift card remained at \$20, but the cost of each download is \$3.00.

How would this change the equation? _____

New Function: _____

Effects on the graph: _____

In this situation, Zoey can afford _____ downloads.