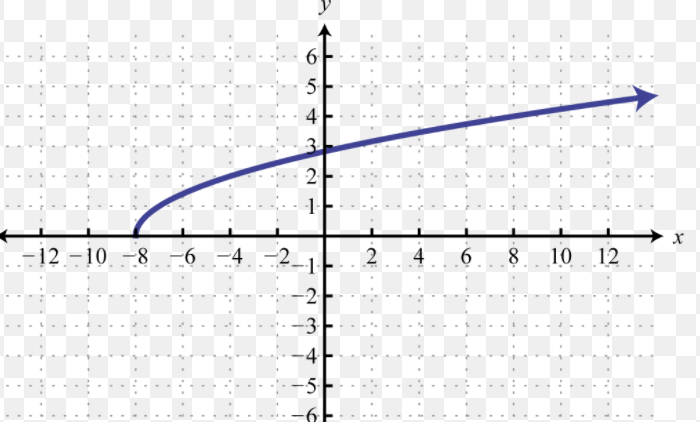
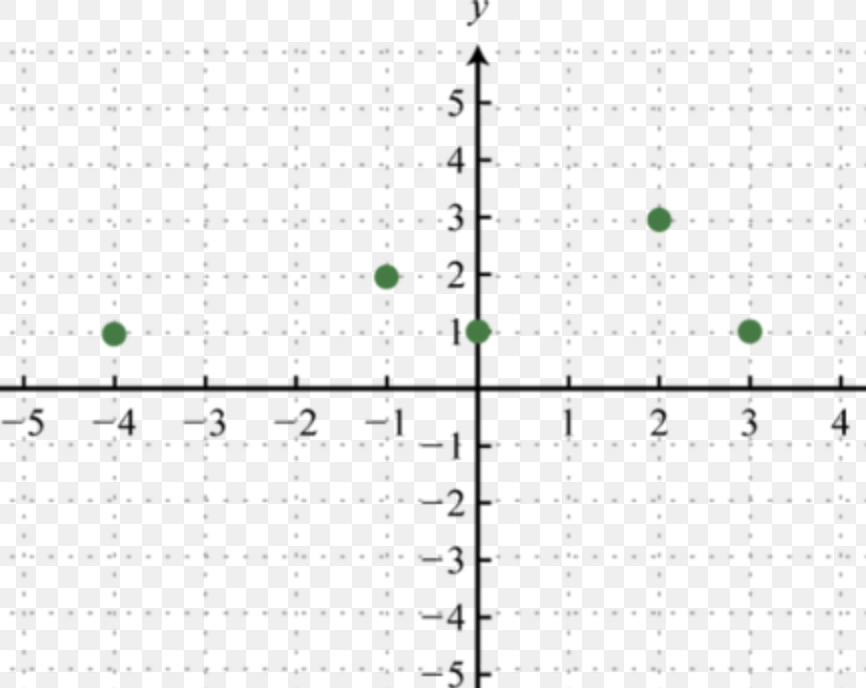
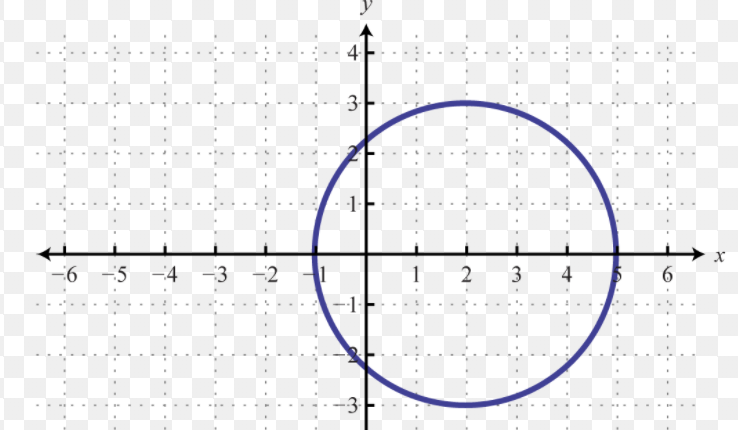
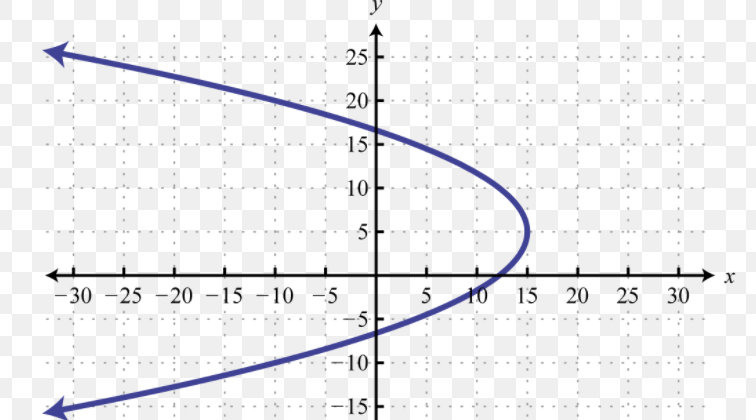
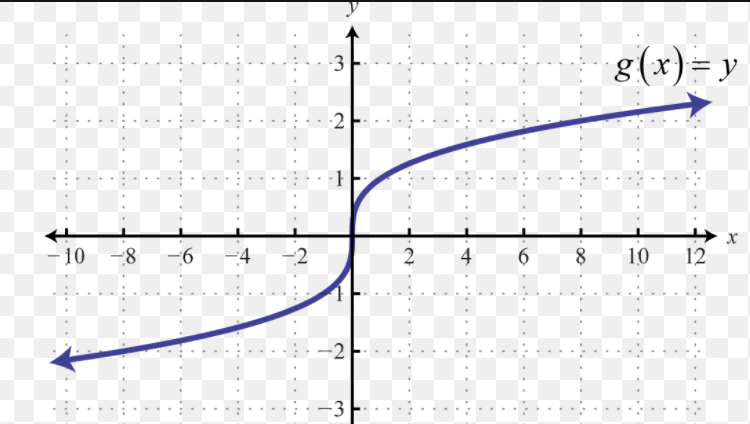
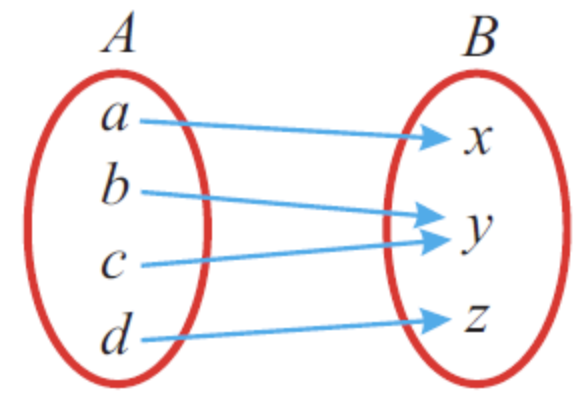
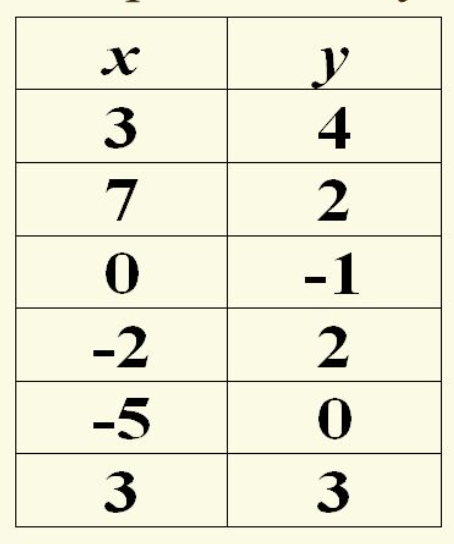
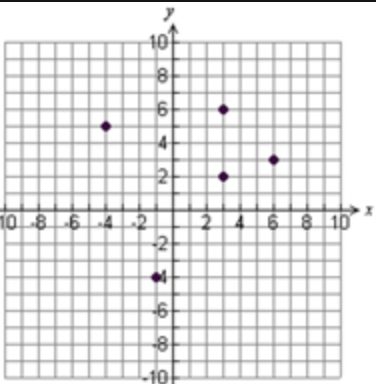
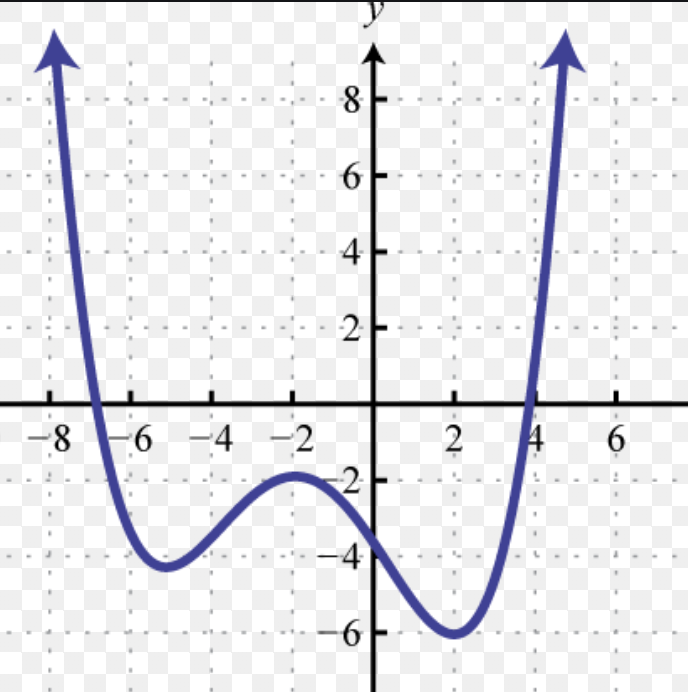
**Chapter 5 Practice TEST**

1. For the following relations, determine if they are functions. Determine their domain and range and which variable is the independent/dependent one.  
     
   a)   
     
     
     
     
     
   b)   
     
     
     
     
     
     
   c) The salary, *S*, when you work *t* hours in a week, knowing that you are paid $10/hour.  
     
     
     
     
     
     
     
   d) The price paid for ice creams if you invite up to 10 friends and each ice cream costs $3.  
     
     
     
     
     
     
     
   e)   
     
     
     
     
     
     
     
     
     
     
     
     
     
     
     
   
2. Let   
   a) Determine   
     
     
   b) Determine   
     
     
   c) Determine *x* such that *f*(*x*)  20  
     
     
     
     
   d) What are the *x* and *y* intercepts ?
3. Let   
   a) Determine Determine   
     
     
     
   b) Determine *x* such that ?  
     
     
     
     
     
   c) What are the *x* and *y* intercepts ?

1. Let’s consider the following relation for the interests received in January this year:

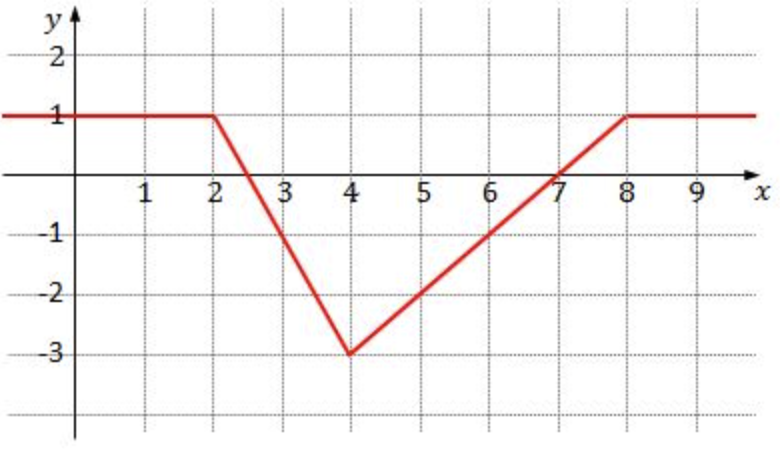
|  |  |
| --- | --- |
| **Time (days)** | **Interest ($)** |
| 0 | 2 |
| 5 | 3 |
| 12 | 4 |
| 21 | 5 |

**a)** Graph it, and explain why you are or aren’t connecting the dots.  


**c)** Could you extend the graph? Could you interpolate ?

**d)** Determine the domain and range.

1. Determine the following values from the graph of  :

****

a)

b)   
  
  
c)   
  
  
d) the value(s) of *x* such that

1. Determine the following values from the graph of  :

****

a)

b)

c)

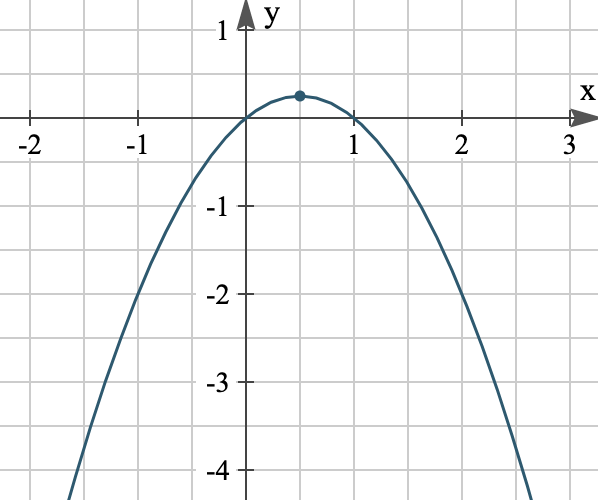
d) the value(s) of *x* such that

a)

b)

c)

d) the value(s) of *x* such that

****

1. Alex sells organized day trips. She charges $125 a day, plus $55 more for each participant. Let *n* be the number of participants on a given day and *P* her benefit for that day.   
   a) Determine an equation for *P* as a function of *n*.  
     
     
   b) Write that equation in function notation.  
     
     
     
   c) Determine P(6). What does it represent in this situation ?  
     
     
     
     
   d) Determine *n* such that . What does it represent in this situation ?
2. Complete the following table of values for: and then graph it.

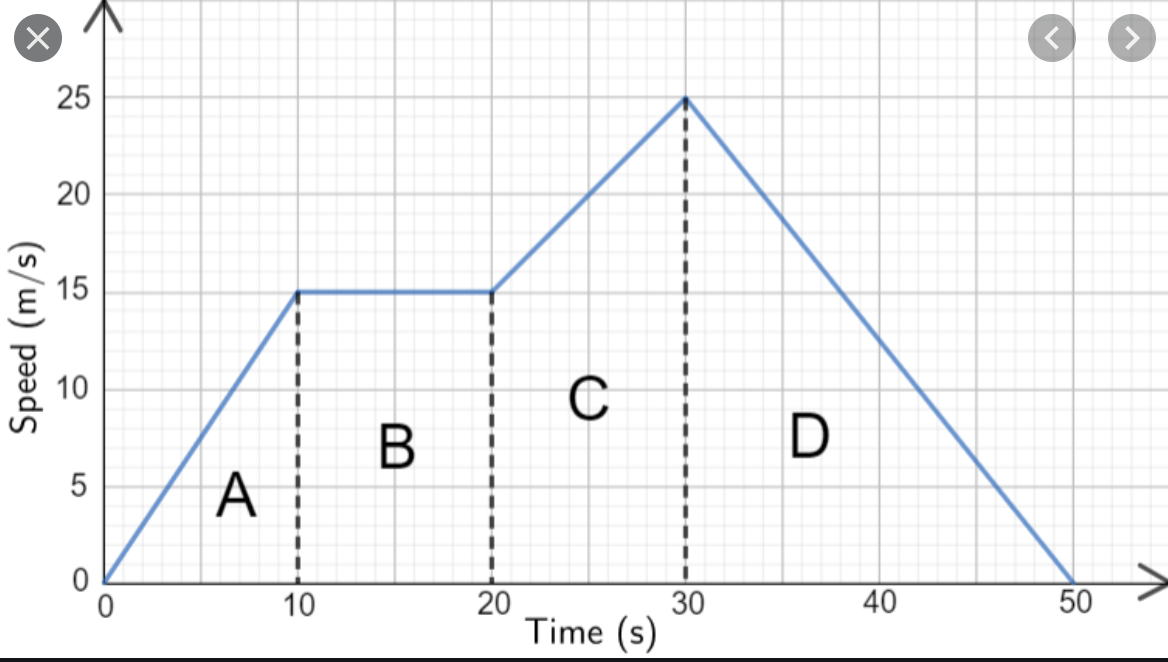
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *x* |  | 1 | 2 | 3 | 4 | 5 |
| *y* |  |  |  |  |  |  |



1. Complete the following table of values for: and then graph it.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *x* |  |  | 0 | 1 | 2 | 3 |
| *y* |  |  |  |  |  |  |



1. Describe a possible scenario:  
   a)   
     
   b)   
   