

*A.G.3: Determine whether a relation is a function, by examining ordered pairs and inspecting graphs of relations.*

1. 080919ia, P.I. A.G.3

Which relation is *not* a function?

- [A]  $\{(-1,2), (0,5), (5,0), (2,-1)\}$   
 [B]  $\{(1,5), (2,6), (3,6), (4,7)\}$   
 [C]  $\{(-1,6), (1,3), (2,5), (1,7)\}$   
 [D]  $\{(4,7), (2,1), (-3,6), (3,4)\}$

2. 080403b, P.I. A.G.3

Which set of ordered pairs is *not* a function?

- [A]  $\{(0,0), (1,1), (2,2), (3,3)\}$   
 [B]  $\{(1,2), (3,4), (4,5), (5,6)\}$   
 [C]  $\{(3,1), (2,1), (1,2), (3,2)\}$   
 [D]  $\{(4,1), (5,1), (6,1), (7,1)\}$

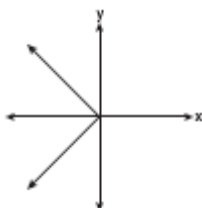
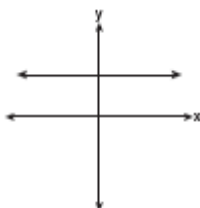
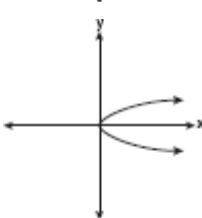
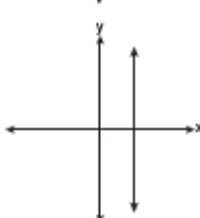
3. 060715b, P.I. A.G.3

Which set of ordered pairs does *not* represent a function?

- [A]  $\{(3,-2), (4,-3), (5,-4), (6,-5)\}$   
 [B]  $\{(3,-2), (3,-4), (4,-1), (4,-3)\}$   
 [C]  $\{(3,-2), (-2,3), (4,-1), (-1,4)\}$   
 [D]  $\{(3,-2), (5,-2), (4,-2), (-1,-2)\}$

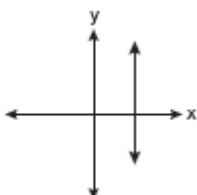
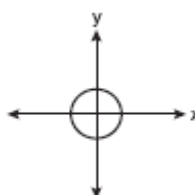
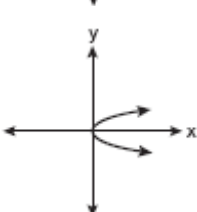
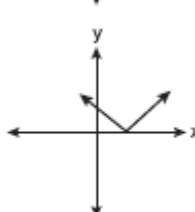
4. fall0730ia, P.I. A.G.3

Which graph represents a function?

- [A]   
 [B]   
 [C]   
 [D] 

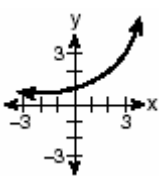
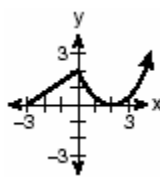
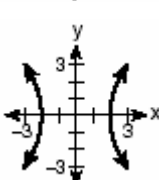
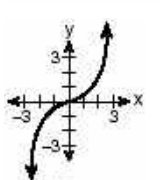
5. 010930ia, P.I. A.G.3

Which graph represents a function?

- [A]   
 [B]   
 [C]   
 [D] 

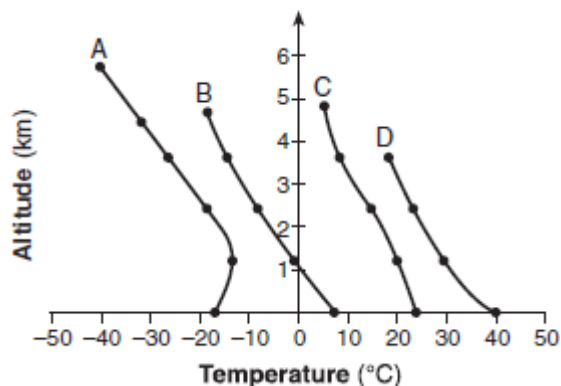
6. 010511b, P.I. A.G.3

Which graph is *not* a function?

- [A]   
 [B]   
 [C]   
 [D] 

7. 060902b, P.I. A.G.3

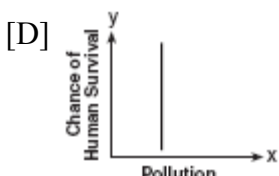
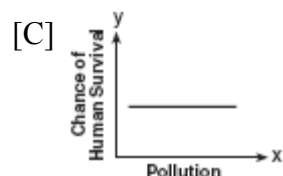
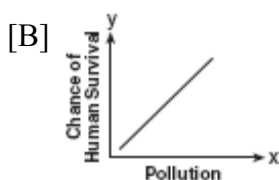
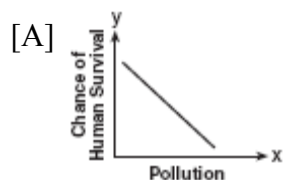
The accompanying graph shows the curves of best fit for data points comparing temperature to altitude in four different regions, represented by the relations *A*, *B*, *C*, and *D*.



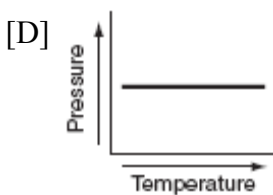
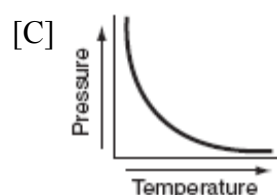
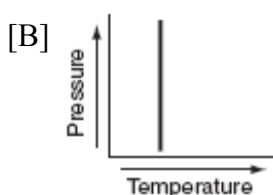
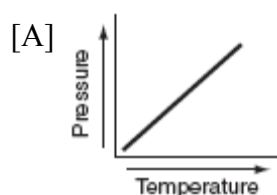
Which relation is *not* a function?

- [A] *A*      [B] *D*      [C] *B*      [D] *C*

8. 080301b, P.I. A.G.3

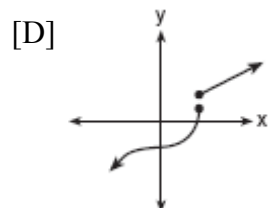
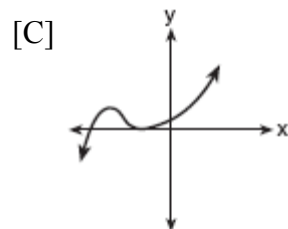
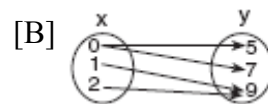
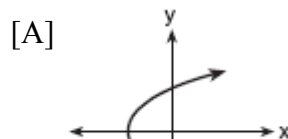
Which graph does not represent a function of  $x$ ?

9. 060601b, P.I. A.G.3

Each graph below represents a possible relationship between temperature and pressure. Which graph does *not* represent a function?

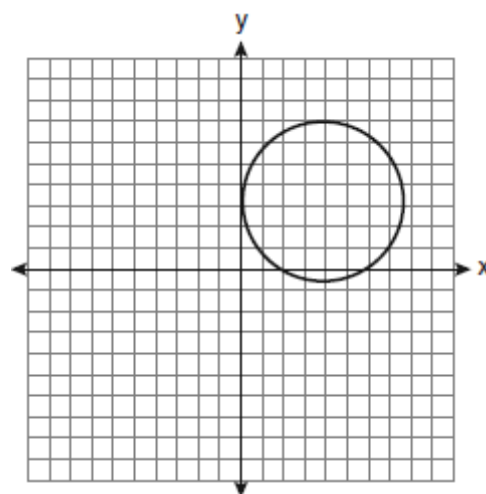
10. 060310b, P.I. A.G.3

Which diagram represents a relation in which each member of the domain corresponds to only one member of its range?



11. 060919ia, P.I. A.G.3

Which statement is true about the relation shown on the graph below?



[A] It is a function because there exists one  $x$ -coordinate for each  $y$ -coordinate.

[B] It is *not* a function because there are multiple  $x$ -values for a given  $y$ -value.

[C] It is a function because there exists one  $y$ -coordinate for each  $x$ -coordinate.

[D] It is *not* a function because there are multiple  $y$ -values for a given  $x$ -value.

- [1]   C
- [2]   C
- [3]   B
- [4]   B
- [5]   D
- [6]   C
- [7]   A
- [8]   D
- [9]   B
- [10]   C
- [11]   D