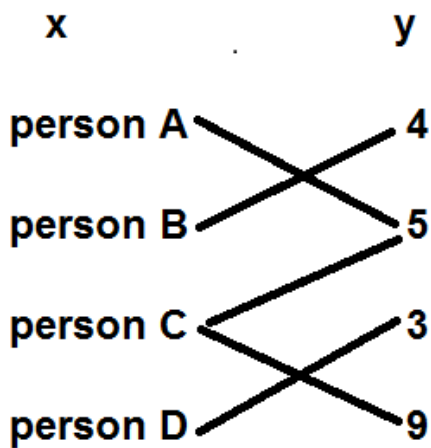


## Lesson 15: Introduction to Functions

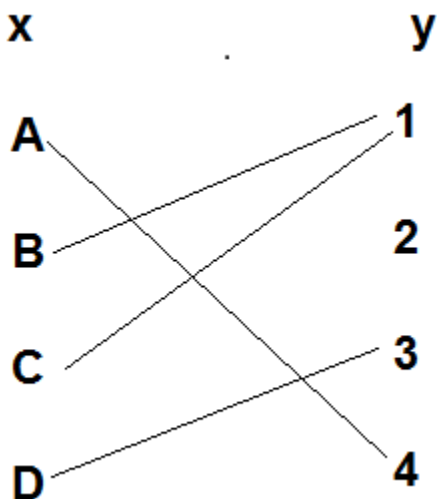
Identify the domain and range of the relation, and determine whether the relation is a function.

- 1)  $\{(3, 2), (4, 5), (5, 4), (6, 7)\}$                       2)  $\{(3, 2), (4, 5), (3, 4), (6, 7)\}$   
3)  $\{(3, 2), (4, 2), (5, 2), (6, 2)\}$                       4)  $\{(3, 2), (3, 5), (5, 5), (5, 2)\}$

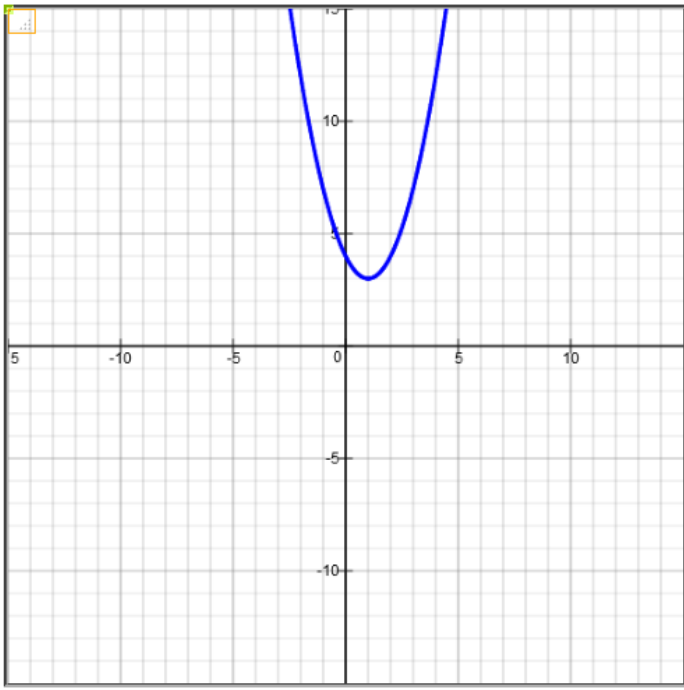
5) Determine whether the relation defines  $y$  as a function of  $x$ .



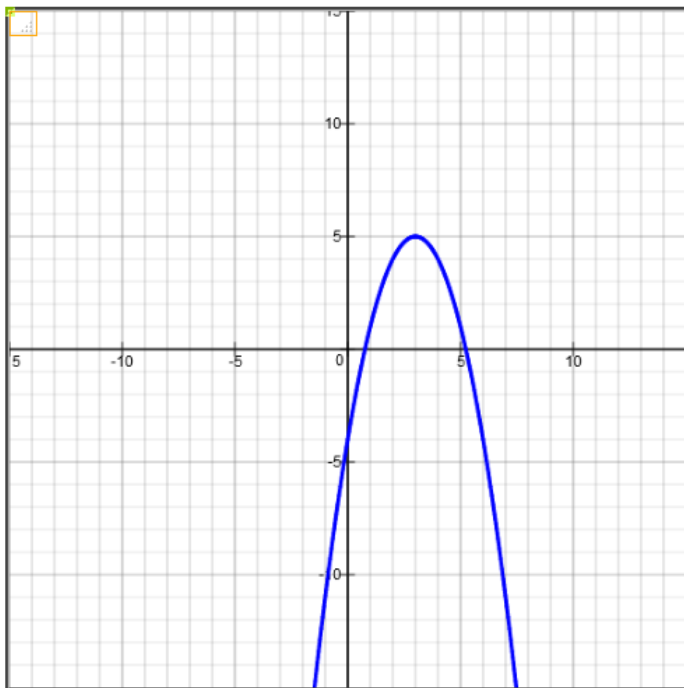
6) Determine whether the relation defines  $y$  as a function of  $x$ .



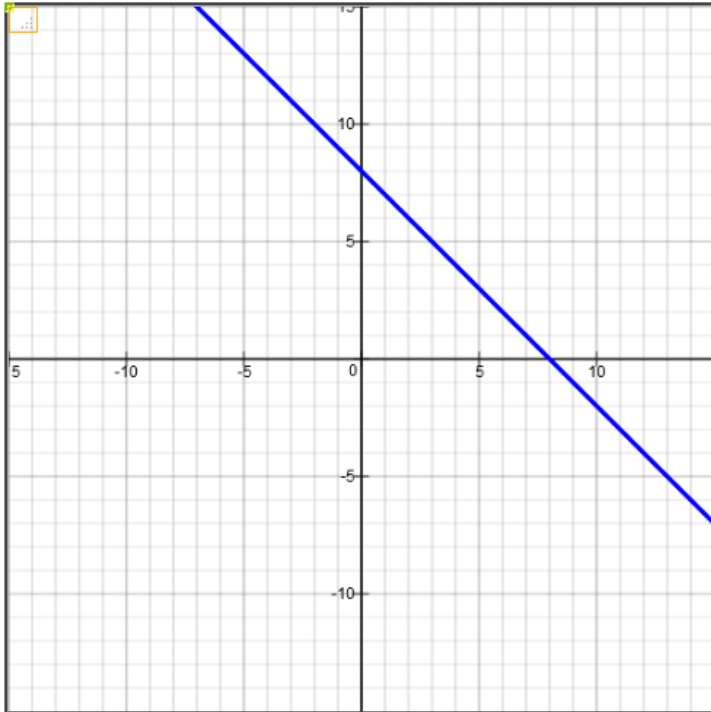
7) Find the domain and range of the function graphed. Determine whether the graph below the graph of a function.



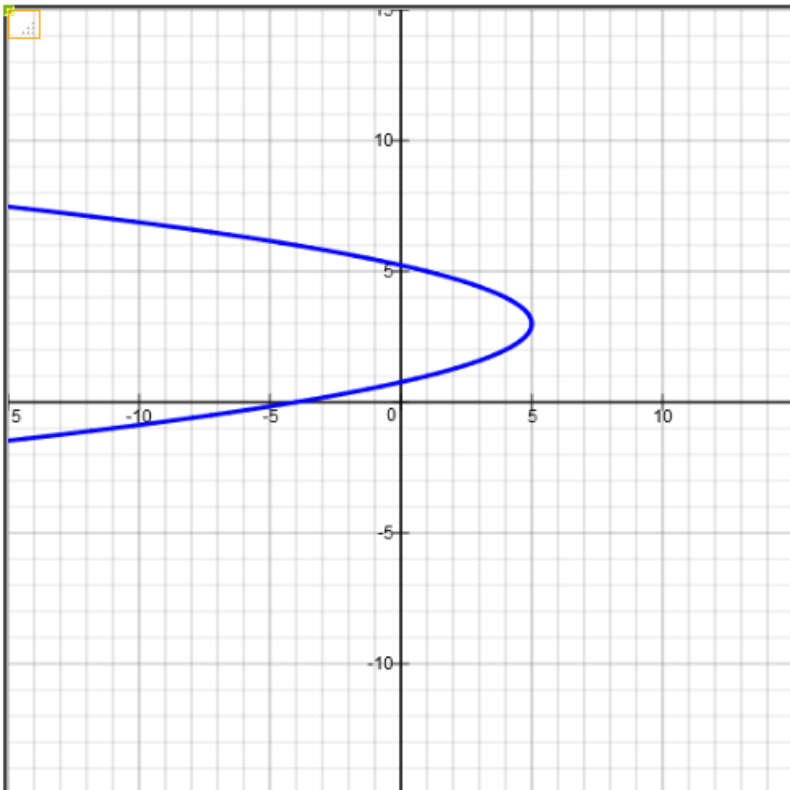
8) Find the domain and range of the function graphed. Determine whether the graph below the graph of a function.



9) Find the domain and range of the function graphed. Determine whether the graph below the graph of a function.



10) Find the domain and range of the function graphed. Determine whether the graph below the graph of a function.



11) Evaluate as indicated.

$$f(x) = 3x + 8$$

$$f(1) = \underline{\hspace{2cm}}$$

$$f(-4) = \underline{\hspace{2cm}}$$

12) Evaluate as indicated.

$$f(x) = 3x^2 + 2$$

$$f(0) = \underline{\hspace{2cm}}$$

$$f(-2) = \underline{\hspace{2cm}}$$

13) Evaluate as indicated.

$$f(x) = 5x^3 - 3x^2 + 8$$

$$f(1) = \underline{\hspace{2cm}}$$

$$f(-2) = \underline{\hspace{2cm}}$$

13) Evaluate as indicated.

$$f(x) = x^3 - 3x^2 + 8x - 5$$

$$f(2) = \underline{\hspace{2cm}}$$

$$f(-3) = \underline{\hspace{2cm}}$$

