**Functions**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

In a function, every input has exactly one output. The input is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_variable, which you control. The output is dependent on the input and is therefore called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ variable. The variable \_\_\_ represents the independent variable and \_\_\_ is the variable that represents the dependent variable.

1. Which of the following equations are functions?

1. Which of the following are tables of functions?

|  |  |
| --- | --- |
| x | y |
| -2 | 8 |
| -1 | 2 |
| 0 | 0 |
| 1 | 2 |
| 2 | 8 |
| x | y |
| 0 | 2 |
| 1 | 4 |
| 2 | 8 |
| 3 | 16 |
| 4 | 32 |
| x | y |
| 1 | 4 |
| 2 | 5 |
| 1 | 6 |
| 2 | 7 |
| 3 | 8 |

1. Which of the following graphs are functions?



1. What is function notation?
2. Evaluate for the function
3. The function describes the height in feet of a tennis ball x seconds after it is shot straight up into the air from a pitching machine. Evaluate and interpret the meaning of the point in the context of the problem.

Independent Practice

1. Which of the following equations are functions?

1. Which of the following are tables of functions?

|  |  |
| --- | --- |
| x | y |
| -2 | -4 |
| -1 | -1 |
| 0 | 0 |
| 1 | 1 |
| 2 | 4 |
| x | y |
| 1 | 1 |
| 1 | 2 |
| 0 | 3 |
| 2 | 4 |
| 4 | 5 |
| x | y |
| 1 | -1 |
| 2 | -3 |
| 3 | -5 |
| 4 | -7 |
| 5 | -9 |

1. Which of the following graphs are functions?

   

1. Evaluate for the function
2. Evaluate for the function
3. Evaluate for the function

1. The function describes the height in feet of a football x seconds after it is kicked straight up into the air. Evaluate and interpret the meaning of the point in the context of the problem.