Name_____

BELL WORK

INDEPENDENT AND DEPENDENT

1. Solve 8y – 2(y – 3) = 18	2. Solve 2(t + 2) – 3t = -1

INDEPENDENT VARIABLE – input value, on the x-axis

DEPENDENT VARIABLE – output value, on the y-axis

The value of the **DEPENDENT VARIABLE** _____on the value of the **INDEPENDENT VARIABLE.**

The **DEPENDENT VARIABLE** is a _____ the **INDEPENDENT VARIABLE.**

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1. On average, Jay can ride his bike 12 miles in one hour. The function $m = 12h$ represents the number of miles, m, he can ride in h hours.

Input variable: _____ Output variable: _____

Which quantity in this relationship is the dependent quantity? _____

Which quantity in this relationship is the independent quantity? _____

_____Which of the following statements is true?

A. The number of hours depends on the number of miles.

B. The number of miles depends on the number of hours.

After work, Jay only has 4 hours to ride his bike before it gets dark. What domain and range are reasonable for this situation?

D:_____ R:_____

2. Paul pays a $27 fee and $15 each hour he uses the sailboat. Let "c" represent the total cost of renting the sailboat for "h" hours.

Write the equation: _____

Write in function notation: _____

Which quantity in this relationship is the dependent quantity? _____

Which quantity in this relationship is the independent quantity? _____

Paul has a budget of $200 to spend on renting the sailboat. What domain and range are reasonable for this situation?

D:_____ R:_____

3. Katie's mom gave her $15 to send flowers to her friend for her birthday. To determine the total cost of the flowers, T, the equation T = 0.60L + 7.50 can be used, where L represents the number of lilies used in the arrangement.

Which quantity in this relationship is the dependent quantity? _____

Which quantity in this relationship is the independent quantity? _____

_____Which of the following is true?

A. The value of L is constant in the relationship to T.
B. The value of T is constant in the relationship to L.
C. The value of L is dependent on T.
D. The value of T is dependent on L.

What is maximum value of the domain for this situation? _____

_____ **4. If y is a function of x in the equation y = 6x – 4, which of the following statements is true?**

A. The independent variable x is 4 less than 6 times the dependent variable, y.
B. The independent variable y is 4 less than 6 times the dependent variable, x.
C. The dependent variable x is 4 less than 6 times the independent variable, y.
D. The dependent variable y is 4 less than 6 times the independent variable, x.