

Linear Equation Word Problems

A linear equation can always be written in the form $y = mx + b$.

mx is the variable term: What is the rate of change? Is it increasing or decreasing? Multiply or divide by x .

b is the constant term: What is the starting point? Add it to or subtract it from the variable term.

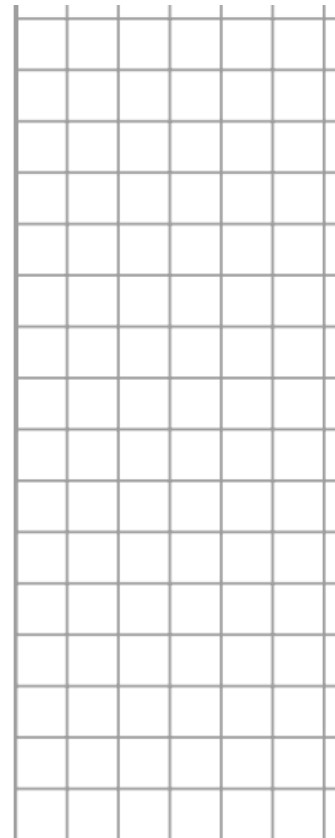
x is the variable you solve for - What did I input? What is independent?

y is after the equals sign - What is my output? What is dependent?

Ex. 1 Sam has a Starbucks gift card worth \$15. He spends \$3 on every large cappuccino he buys.

- a. Define x and y .
- b. Write a linear equation for the amount on his gift card.
- c. Make a table for the scenario.
- d. Make a graph.

X:	Y:



- e. SOLVE an equation for how many cappuccinos he must have bought if he only has \$6 left?
- f. How much money does he have on his gift card if he has bought 2 cappuccinos?

