

Practice with Functions and Tables

Just the Basics ~

_____ is the relation between 2 quantities that are proportional (they have the same unit rate).

_____ represents the "constant of proportionality," or unit rate. As x and y values change, this stays the same.

When one variable increases, the other variable _____.

If your y values are smaller than your x values, this means that k must be a _____

or a _____



Practice Input/Output~ Using the given rules, find the missing x and y values.

1) $y = 9x$

x	0		3	5	8
y		18			

2) $y = 12x$

x	1		6		12
y		48		120	

3) $y = 1.25x$

x	0	2	4	6	8
y					

4) $y = \frac{2}{5}x$

x	0	4	9		20
y				4	

Practice Writing Rules~ Using the given values, determine the equations in terms of $y = kx$

5) Equation: _____
How do you know this equation works?

x	0	1	2	3	4
y	0	5	10	15	20

6) Equation: _____
How do you know this equation works?

x	0	9	12	21	27
y	0	3	4	7	9

1) Rhea is purchasing tickets to a One Direction concert. Tickets cost \$35 apiece.

Since tickets cost \$35, that is the _____, because this won't change.

X is the input (or independent variable), and this is the number of tickets purchased.

Y is the output (or dependent variable), and this is the total cost.

Since the constant is 35, the equation is _____

Rule: $y = 35x$

X (# tickets)	0	2	3		6
Y (total cost)				140	



2) Rocky is saving up for a new Tony Hawk game for his Wii. He earns \$7.50 for each chore he does.

What is k, the constant? _____

X, the input, is the number of chores Rocky completes.

Y, the output, is the amount of money Rocky makes.

What is the equation? _____



Using this rule/equation, fill in the values in the table below.

X (# chores completed)		2		15	50
Y (total money earned)	0		75		

3) There are 37 boys in the drama club. They want to buy new props, so they are all going to pitch in some money. They all want to pitch in the same amount.

K, the constant, is 37. This number is not going to change.

The amount that each boy brings in is the input, or the _____ value.

The total amount raised is the output, or the _____ value.

What is the equation? _____



Using this rule/equation, fill in the values in the table below.

X (amount each boy brings)	0	3	5	8.50	
Y (total amount raised)					370

4) Notice that direct variation ALWAYS uses the formula $y = kx$,
Therefore, when $x = 0$, y ALWAYS equals _____!