

Counseling - math problem example



Counseling

Full Professor Functions and Linear Equations Functions and linear equations are made more clearly understood through graphing and they both yield lines. Functions are usually with only one unknown value which could either be the value of x or y while linear equations find the value of x and y in one equation. This then limits the values for a function where there is only value of x for every y whereas, the linear function gives unlimited values for both x and y as one tries to solve for such values by substituting assumptions for x to get the value of y . As mentioned earlier, functions and linear equations form lines when they are plotted on graphs so that from this point of view, it is concluded that a function is a linear equation and vice versa. Functions are easily determined because the values of x and y come in ordered pairs while linear equations take the form $y = mx + b$ where m and b are constants.

Considering the function $x(x-1) = 3y$, it is determined that this is not a linear function because it will not yield a straight line when the values of x and y are plotted on a graph. For instance, when we consider the values of x at 3, 1 and 0, the values of y will be 2, 0 and 0 respectively. We notice that there are two domains or values of x which are 1 and 0 corresponding to one range or value of y , 0. This fact then proves that the function is not linear because a straight line is not formed. Sometimes solving equations do not make sense but plotting them on graphs makes sense especially when we examine where and how they can be used. For instance, with the rates of births and deaths, we can foresee the population in the next ten years.