
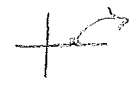


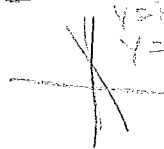


- Sometimes True, Always True, Never True
- Could be thought of as 2 diff. ways.
 An equation in two variables has an infinite number of solutions. ^{y-values} *sometimes* 
 - A rectangular coordinate system has two real number axes. *always*
 - In the graph of an ordered pair, the first number is the *y*-coordinate and the second number is the *x*-coordinate. *never*
 - The solution of an equation with two variables is an ordered pair.
 - The point $(-2, -4)$ is in the fourth quadrant. *never*
 - In quadrant III, the second coordinate of a point is negative. *always*
 - A set of ordered pairs is called a function. *sometimes*
 - A function is a relation. *always*
 - The domain of a function is the set of real numbers. *sometimes*
 - Zero is excluded from the domain of a function. *sometimes* 
 - $f(a)$ represents a value in the range of a function when a is a value in the domain of the function. *always*
 - Two ordered pairs of a function can have the same first coordinate. *never*
 - The graph of $y = 1/x + 2$ is the graph of a linear function. *never*
 - The graph of $y - 3 = 0$ is a vertical line. *never*
 $y = 3$ horizontal
 - The graph of a straight line crosses the x -axis when $y = 0$. *always*
 - The graph of a linear equation is a straight line. *always*
 - The point at which a line crosses the y -axis is the x -intercept. *never*
 - $xy + 2 = 0$ is an example of a linear equation. *never*
 $xy = -2$ $y = -2/x$
 - The slope of a line that slants downward to the left is positive. *always* 
 - The y -intercept of a line is the point at which the line crosses the y -axis. *always*
 - The slope of a vertical line is zero. *never*
 undefined
 - A line whose slope is undefined is parallel to the y -axis. *always* 
 - Increasing the value of m in the equation $y = mx + b$ increases the slope of the line that is the graph of the equation. *always*
 $y = 2x + 3$
 $y = -5x + 3$

 Actual #
 Steepness
 - Sometimes
- Could be thought of two diff. ways.

24. Decreasing the value of b in the equation $y = mx + b$ decreases the slope of the line that is the graph of the equation. *never* \swarrow y -int
25. The point-slope formula for the equation of a line is $y - y_1 = m(x - x_1)$. *never* $y - y_1 = m(x - x_1)$
26. $x = a$ is the equation for a vertical line. *always* Since we have x_1 , must have y_1 .
27. The line represented by the equation $y = 2x - \frac{1}{2}$ has slope $-\frac{1}{2}$ and x -intercept 2. *never* $m = 2$
28. If $y = mx + b$, then m represents the rate of change of y with respect to x . *always*
29. A horizontal line has no slope. *never* 0 slope
30. Perpendicular lines have the same y -intercept. *sometimes*
31. Parallel lines have the same slope. *always*
32. Two lines are perpendicular if $m_1 * m_2 = 1$ *never* $m_1 * m_2 = -1$
33. A vertical line is perpendicular to a horizontal line. *always*
34. A line parallel to the y -axis has zero slope. *never* \uparrow \downarrow x *undefined*
35. It is possible to write a linear inequality in two variables that has no solutions. *never*
36. The exponents on the variables in a linear inequality in two variables are 1. *always*
37. The graph of a linear inequality is a half-plane. *always*
38. The graph of a linear inequality in two variables represents a function. *never*
39. The solution of a linear inequality in two variables containing \leq or \geq includes the line separating the half-planes. *always*
40. The solution of the inequality $y > x + 2$ is all the points above the line $y = x + 2$. *always*