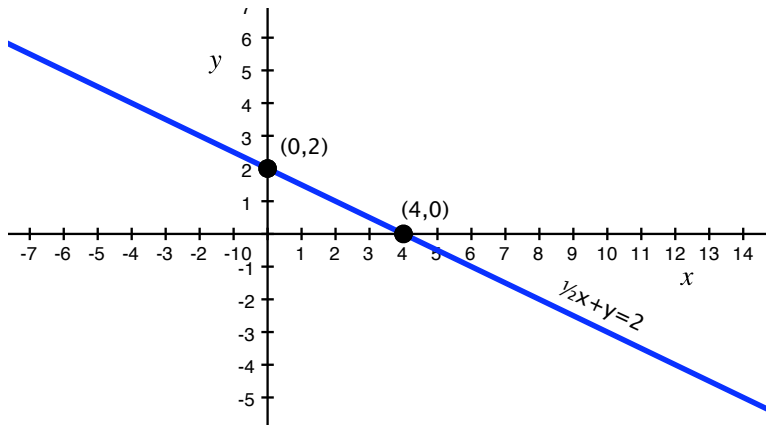


Math 80 Quiz #3 Answers

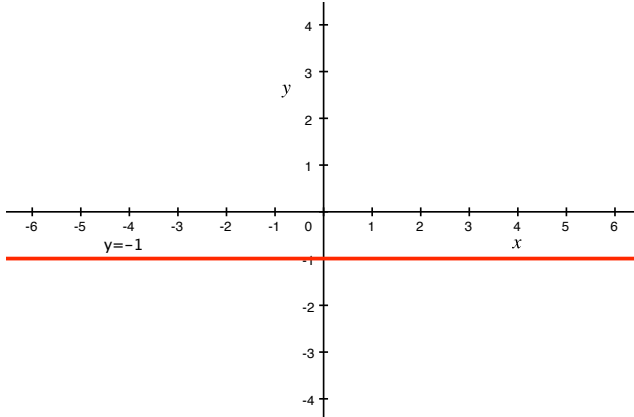
1. Intercepts: If $x = 0$, then $\frac{1}{2}(0) + y = 2 \Rightarrow y = 2$

\Rightarrow $(0, 2)$ and $(4, 0)$

If $y = 0$, then $\frac{1}{2}x + 0 = 2 \Rightarrow x = 4$



2. (a) This line is a horizontal line through points with y -coordinates of -1 .



- (b) Since the line is horizontal, the slope is 0.

3. Grade = $\frac{\text{rise}}{\text{run}} = \frac{150}{200} = \frac{3}{4} = 0.75 =$ 75% (This is a really steep road!)

4. Slope of Line 1 = $\frac{-8 - (-1)}{2 - 5} = \frac{-7}{-3} = \frac{7}{3}$ (Will get the same value if you calculated like so: $\frac{-1 - (-8)}{5 - 2} = \frac{7}{3}$)

Slope of Line 2 = $\frac{7 - 0}{0 - (-3)} = \frac{7}{3}$ (Will get the same value if you calculated like so: $\frac{0 - 7}{-3 - 0} = \frac{-7}{-3} = \frac{7}{3}$)

Since the slopes of the two lines are equal, they are parallel.