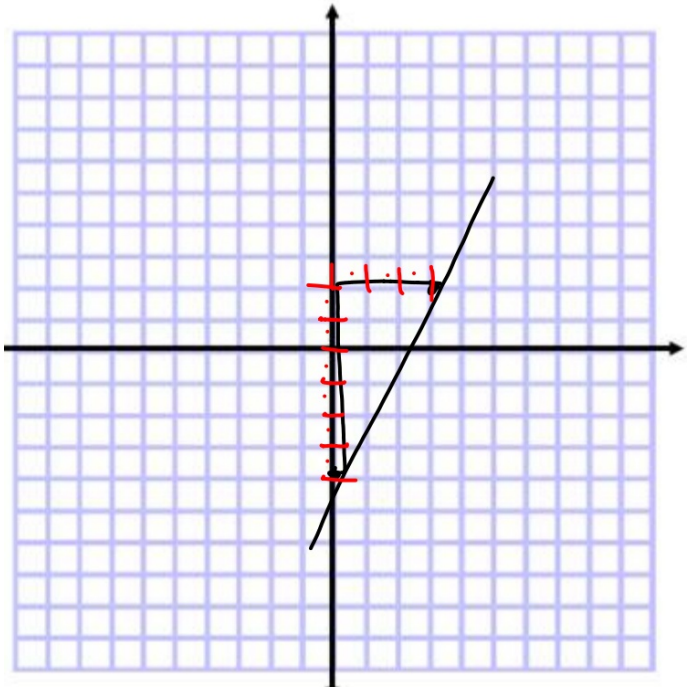
Algebra 1 Review for Midchapter test
Quiz 3.3 today
MCT 3.1-3.3 is Wed.

$m = \frac{\text{vert}}{\text{horiz.}}$ ↑ ↓ / →

Example 3

Find the slope of the line that passes through (0, −4) and (3, 2).

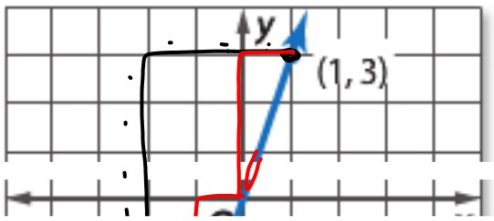


$m = \frac{6}{3} = \frac{2}{1} = 2$

$\frac{7}{4}$

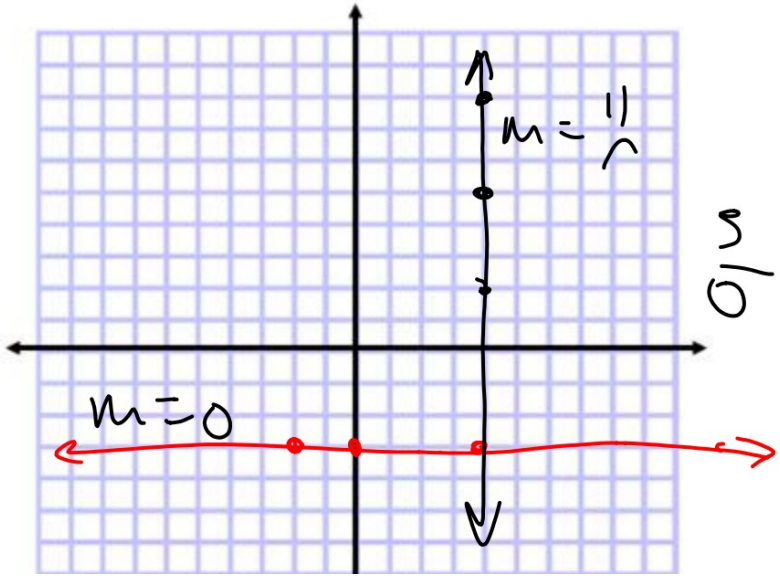
Find the rate of change represented in each table or graph.

27.



28.

x	y
−2	−3
0	−3
4	−3
12	−3

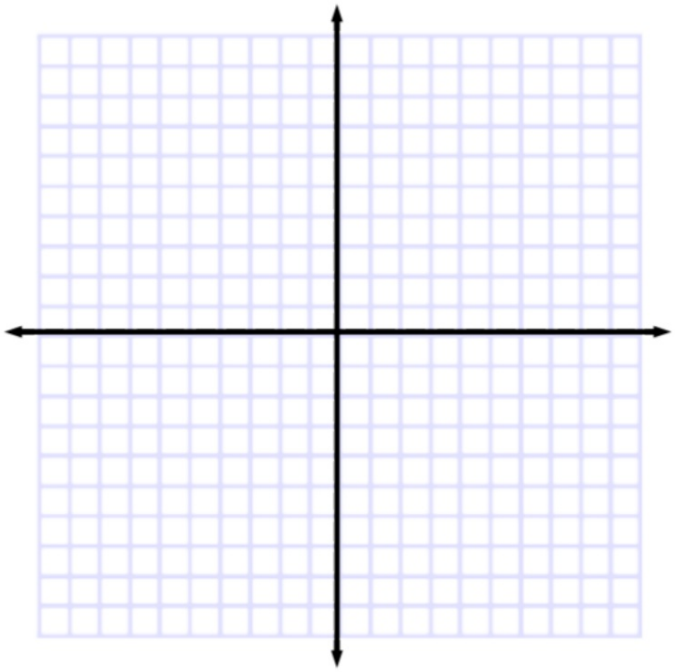


$\frac{0}{2} =$

Find the slope of the line that passes through each pair of points.

29. (0, 5), (6, 2)

30. (−6, 4), (−6, −2)



31. **PHOTOS** The average cost of online photos decreased from $0.50 per print to $0.15 per print between 2002 and 2009. Find the average rate of change in the cost. Explain what it means.

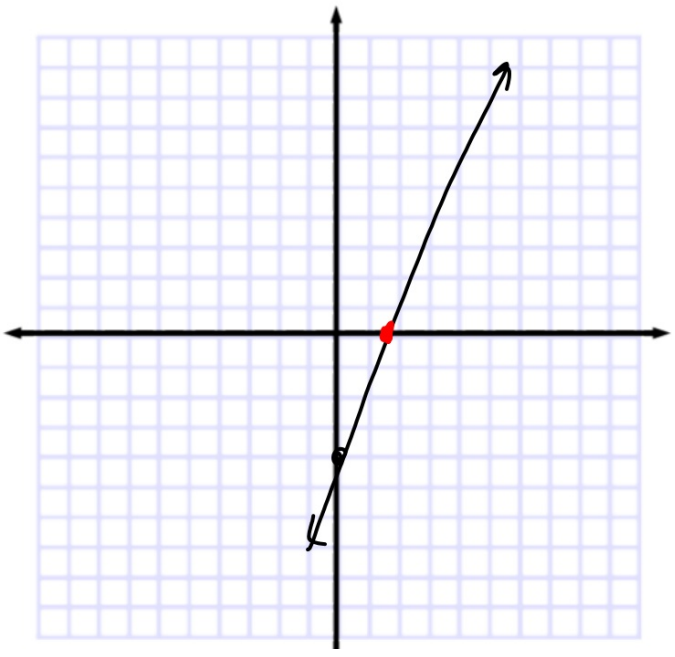
2002, .50 2009, .15 $\frac{-.35}{7} = \frac{-0.5}{1}$

Graph $3x - y = 4$ by using the x- and y-intercepts.

Find the x-intercept. Find the y-intercept.

$(0, -4)$ $\frac{-y}{-1} = \frac{4}{-1}$

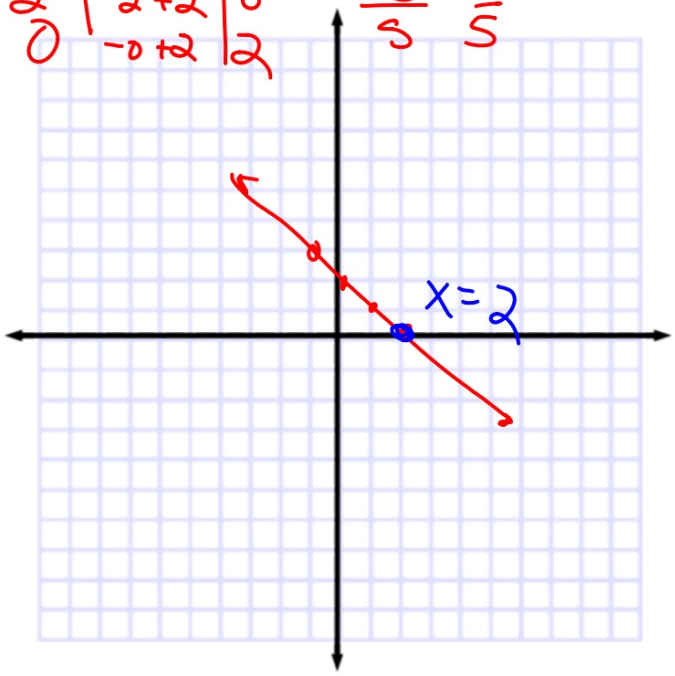
$(1\frac{1}{3}, 0)$ $\frac{3x}{3} = \frac{4}{3}$



Graph each equation.

13. $y = -x + 2$

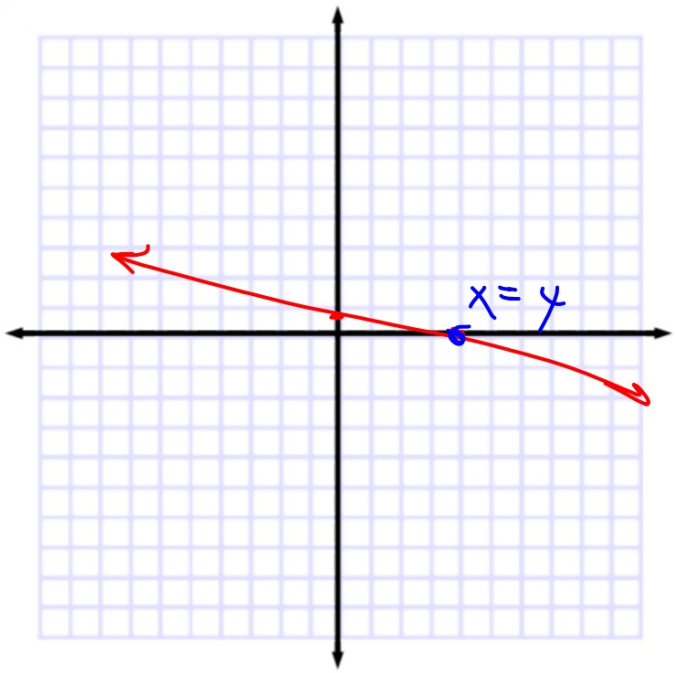
x	$-x+2$	
-1	$-(-1)+2$	3
1	$-1+2$	1
2	$-2+2$	0
0	$-0+2$	2



14. $x + 5y = 4$

$(0, .8)$ $(4, 0)$

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



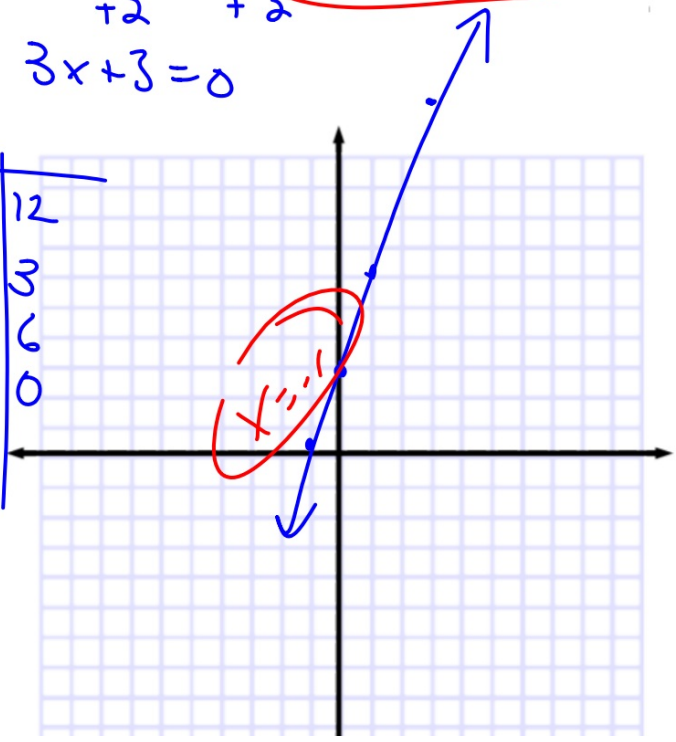
Example 2

Solve $3x + 1 = -2$ by graphing.

$+2 \quad +2$

$y = 3x + 3 \quad 3x + 3 = 0$

3	$3 \cdot 3 + 3$	12
0	$3 \cdot 0 + 3$	3
1	$3 \cdot 1 + 3$	6
-1	$3 \cdot -1 + 3$	0



Solve

Find the root of each equation.

18. $0 = 2x + 8$

$-8 \quad -8$

$\frac{-8}{2} = \frac{2x}{2}$

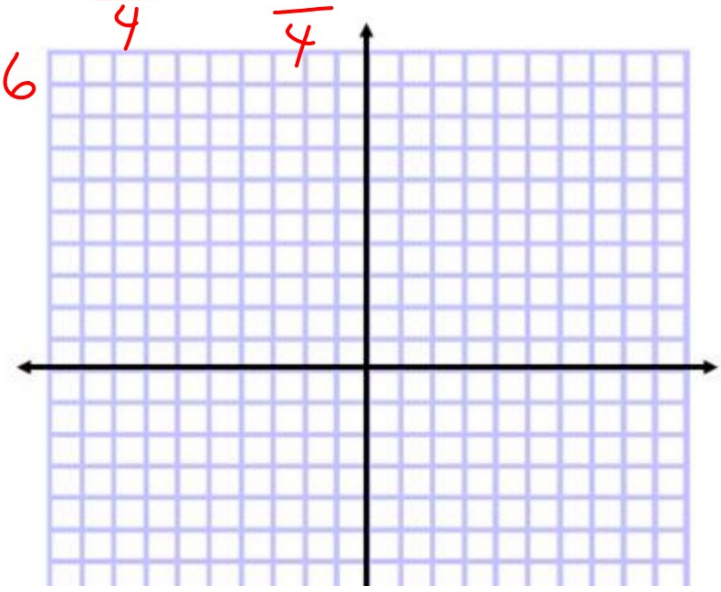
$-4 = x$

19. $0 = 4x - 24$

$24 \quad +24$

$\frac{24}{4} = \frac{4x}{4}$

$x = 6$



Solve each equation by graphing.

22. $0 = 16 - 8x$

$0 = 16 - 8 \cdot 2$

$0 = 16 - 16$

$y = 16 - 8x$

0	$16 - 8 \cdot 0$	16
-1	$16 - 8 \cdot -1$	24
1	$16 - 8 \cdot 1$	8
-3	$16 - 8 \cdot -3$	40

23. $0 = 21 + 3x$

$y = 21 + 3x$