Algebra 1 Ch. 3 Review

Review Ch. 3 (test is Fri.)

Quiz 3.5-3.6

Whiteboards

$-1x$

$(0, .8)$

$(4, 0)$

Graph each equation.

13. $y = -x + 2$

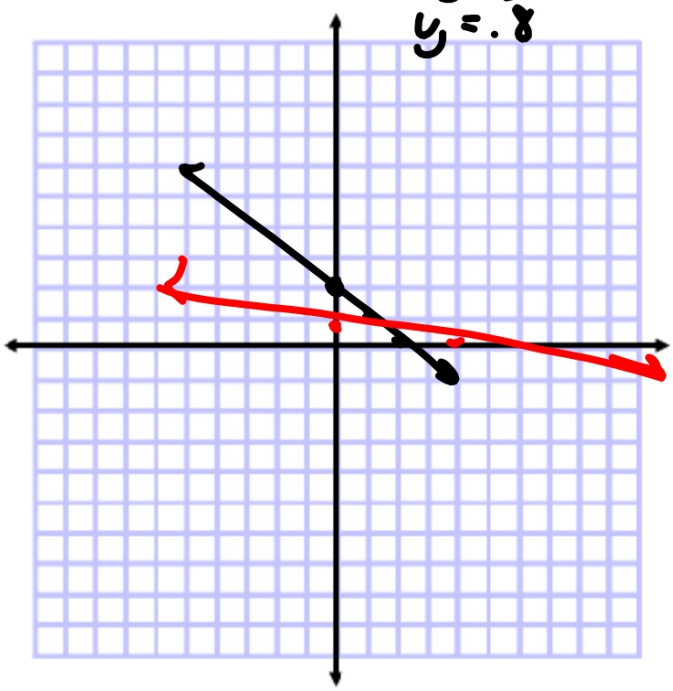
$y = mx + B$

14. $x + 5y = 4$

$5y = 4$

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

$y = .8$



Solve ~~each equation by graphing~~.

22. $0 = 16 - 8x$ **23.** $0 = 21 + 3x$

$0 = 2x - 8$

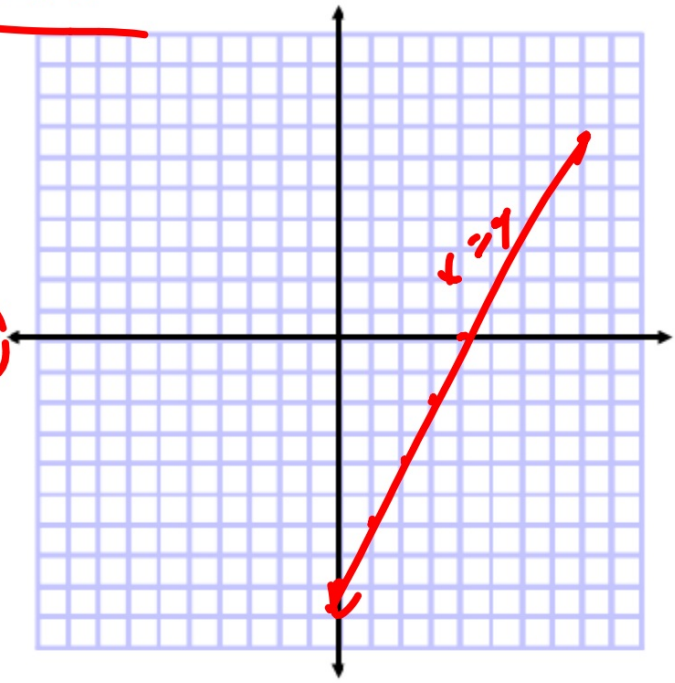
$y = 2x - 8$

$0 = 16 - 8x$

$+8x \quad +8x$

$\frac{8x}{8} = \frac{16}{8}$

$x = 2$



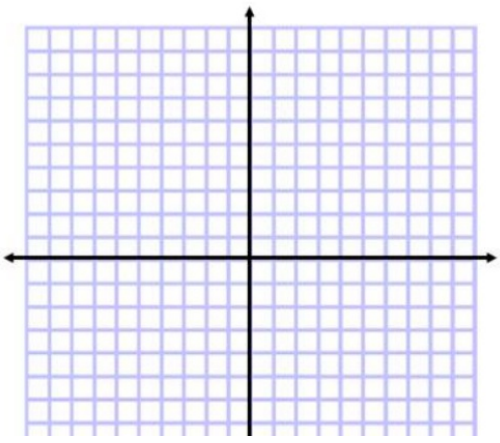
Where does it cross the x-axis?

Find the zero (solve)

24. $-4x - 28 = 0$

25. $25x - 225 = 0$

26. **FUNDRAISING** Sean's class is selling boxes of popcorn to raise money for a class trip. Sean's class paid \$85 for the popcorn, and they are selling each box for \$1. The function $y = 1x - 85$ represents their profit y for each box of popcorn sold x. Find the zero and describe what it means in this situation.



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.

$$\frac{-35}{7} = -5$$

Suppose y varies directly as x. Write a direct variation equation that relates x and y. Then solve.

35. If $y = 15$ when $x = 2$, find y when $x = 8$.

(2, 15)

$y = kx$

$\frac{15}{2} = \frac{k \cdot 2}{2}$

$k = 7.5$

$y = 7.5x$

$y = 7.5(8)$

$y = 60$

38. JOBS Suppose you earn $127 for working 20 hours.

a. Write a direct variation equation relating your earnings to the number of hours worked.

b. How much would you earn for working 35 hours?

$p = k \cdot h$

$\frac{127}{20} = \frac{k \cdot 20}{20}$

$k = 6.35$

$p = 6.35h$

$p = 6.35(35)$

$222.25

Example 5

Find the next three terms of the arithmetic sequence
10. 23. 36. 49. … .

62, 75, 88

$y = 10 + (n-1)(13)$

Write an equation for the nth term of each arithmetic sequence.

41. $a_1 = 6, d = 5$

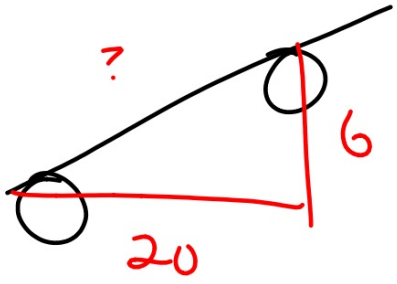
$y = 6 + (n-1)(5)$

42. 28, 25, 22, 19, …

$y = 28 + (n-1)(-3)$

$\frac{6}{20} = \frac{3}{10} \quad \frac{V}{h}$

$\frac{20}{6}$



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