

Algebra 1 Review for Midchapter test

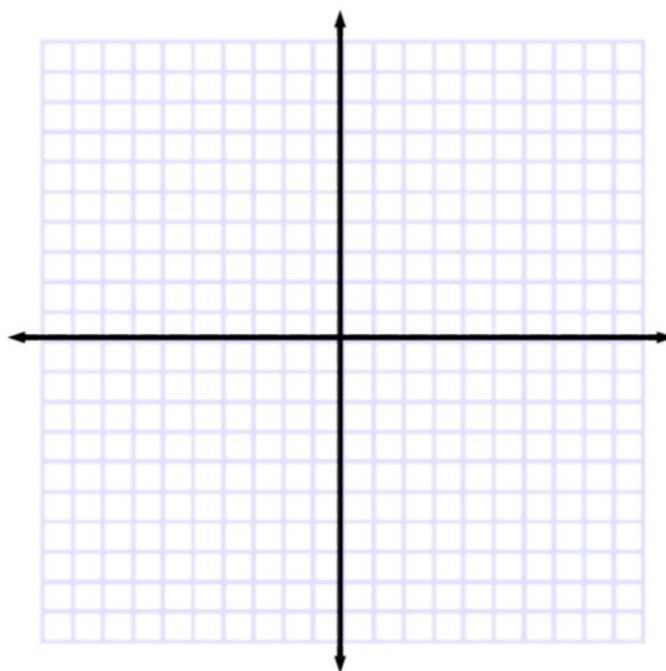
MCT 3.1-3.4 is tomorrow

### Example 3

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

$$m = 2$$

$$= \frac{2}{1}$$



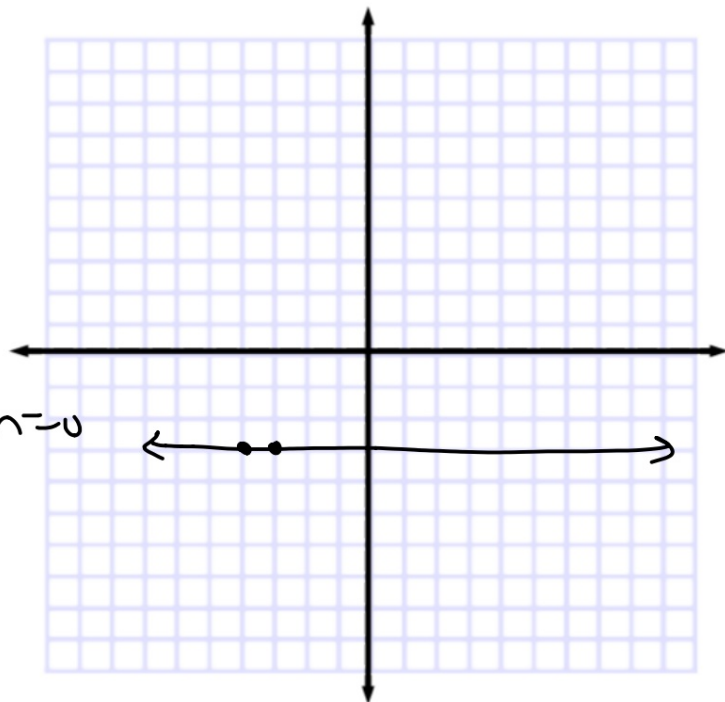
$$\frac{-1400}{2} = -700$$

Find the <sup>Slope</sup>~~rate of change~~ per year

x	y
-2	-3
0	-3
4	-3
12	-3

$$\frac{0}{1}$$

$$m=0$$



$$\frac{0}{3} = \text{undefined}$$

$$= 0$$

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

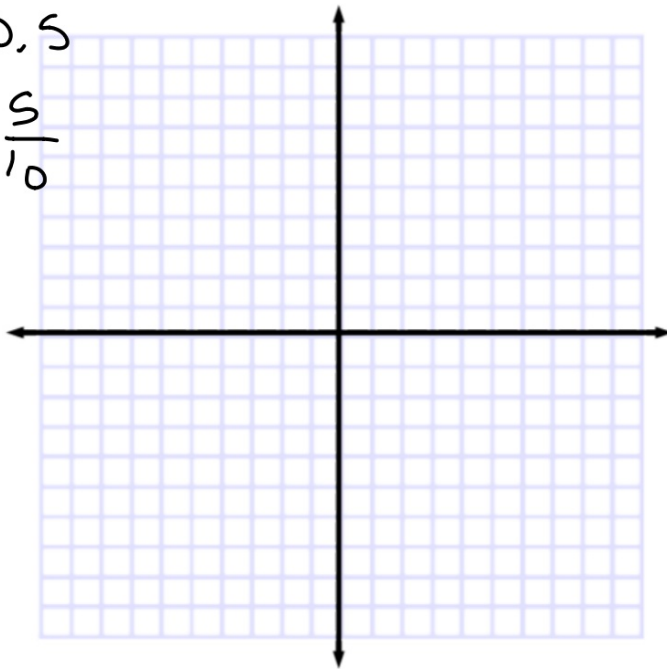
$$\frac{4}{0} =$$

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

30.  $(-6, 4), (-6, -2)$

$$-\frac{1}{2} \quad \frac{1}{-2} \quad -0.5$$

$$\frac{-5}{10}$$



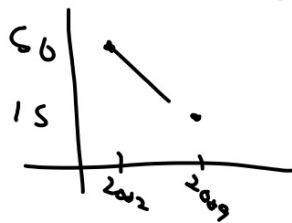
\$ .89

89¢

### 31. Photos

~~0.89¢~~

The average cost of online photos decreased from \$.50 per print to \$.15 per print between 2002 and 2009. Find the rate of change in the cost. Explain what it means.



$$\frac{-.35}{7}$$

per year

\$

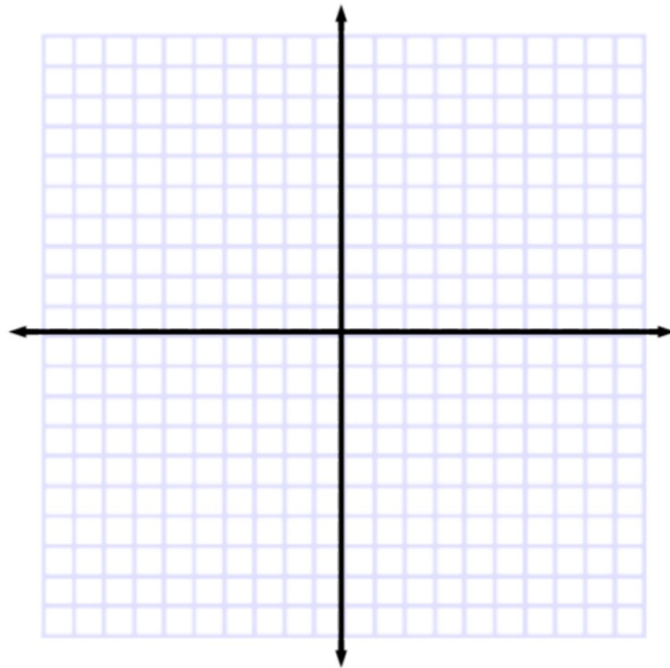
-.05 per year

Ex. 1

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

$$(0, -4)$$

$$(1\frac{1}{3}, 0)$$



$y = mx + b$   
Graph each equation.

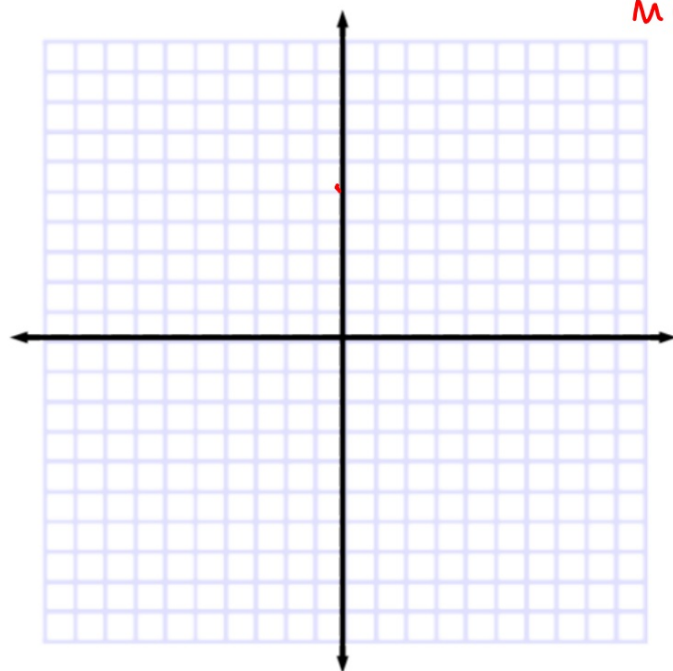
13.  $y = -x + 2$



14.  $x + 5y = 4$

$x$  &  $y$  int

(Use any method)



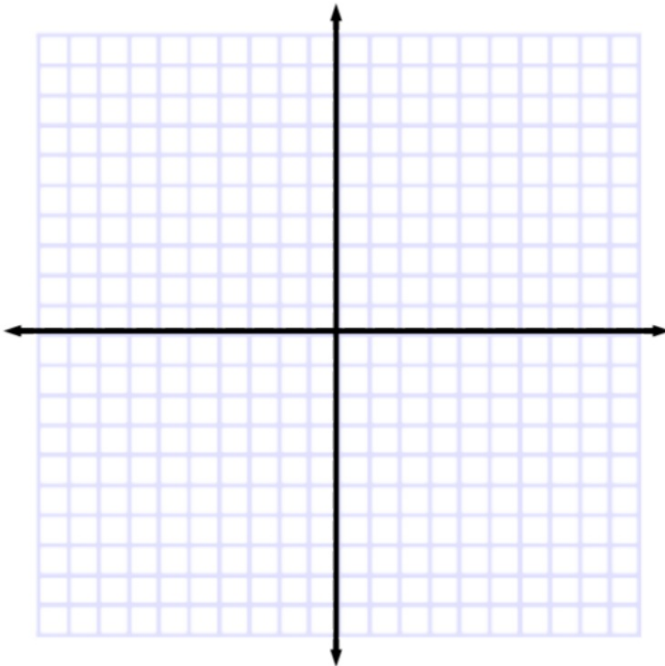
p181  
mcQ 1-24  
all

X-int.

Solve by graphing:

$$3x + 1 = -2$$

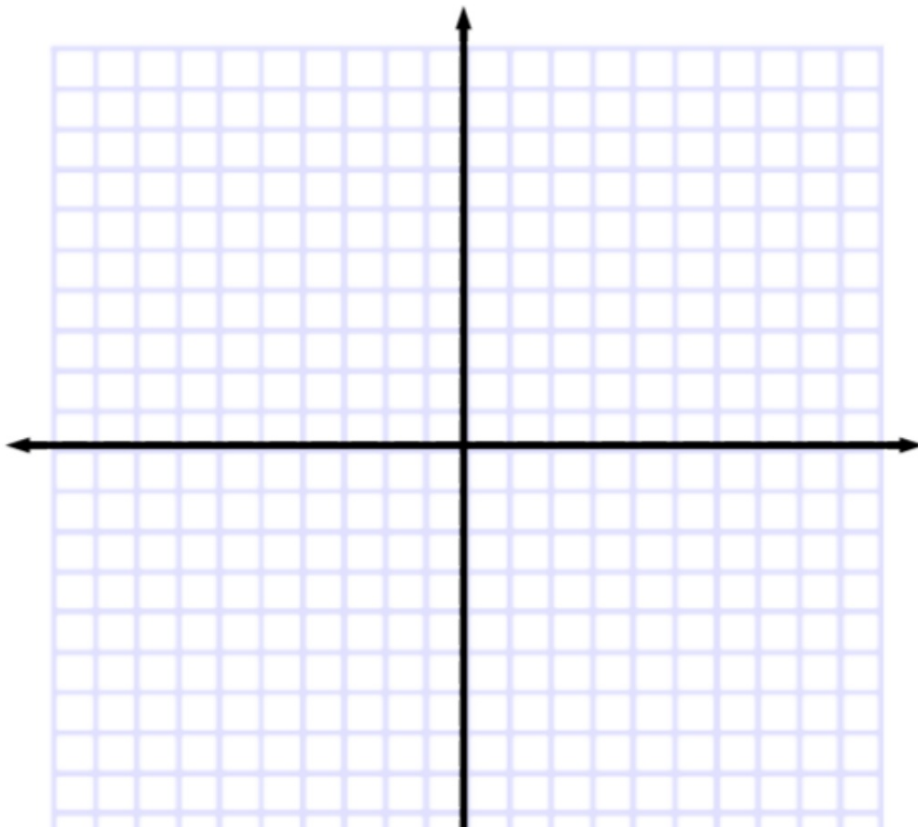
y =





**18.**  $0 = 2x + 8$

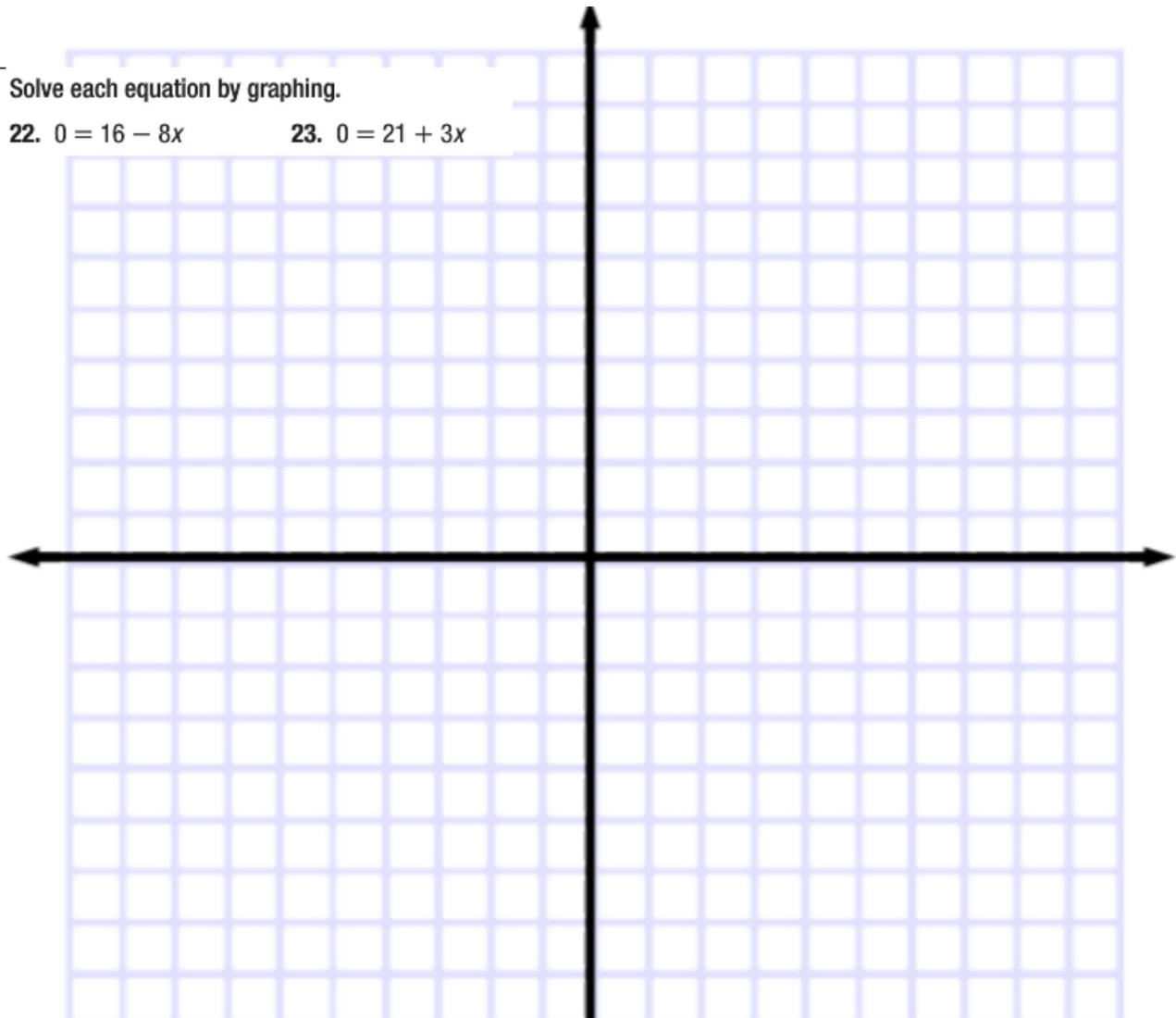
**19.**  $0 = 4x - 24$



Solve each equation by graphing.

22.  $0 = 16 - 8x$

23.  $0 = 21 + 3x$



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  $y = x - 85$  represents their profit  $y$  for each box of popcorn sold  $x$ . Find the zero and describe what it means in this situation.

$$\begin{array}{r} 0 = x - 85 \\ +85 \quad +85 \\ \hline 85 = x \end{array}$$

$$\begin{array}{r} -4x - 28 = 0 \\ +28 \quad +28 \\ \hline -4x = 28 \\ -4 \quad -4 \\ \hline x = \text{ans.} \\ -7 \end{array}$$

Y varies directly as x.

Y=12 when x=8.

Write an equation relating x and y.

What is the value of y when x=44?

$$y = kx$$

$$12 = k \cdot 8$$

$$\frac{12}{8} = k$$

$$\frac{12}{8} = k$$

$$1.5 = k$$

$$y = 1.5(44)$$
$$= 66$$

Graph  $y = \frac{3x}{1} + 0$

