

Algebra 1B
Practice problems
Quiz 4.7

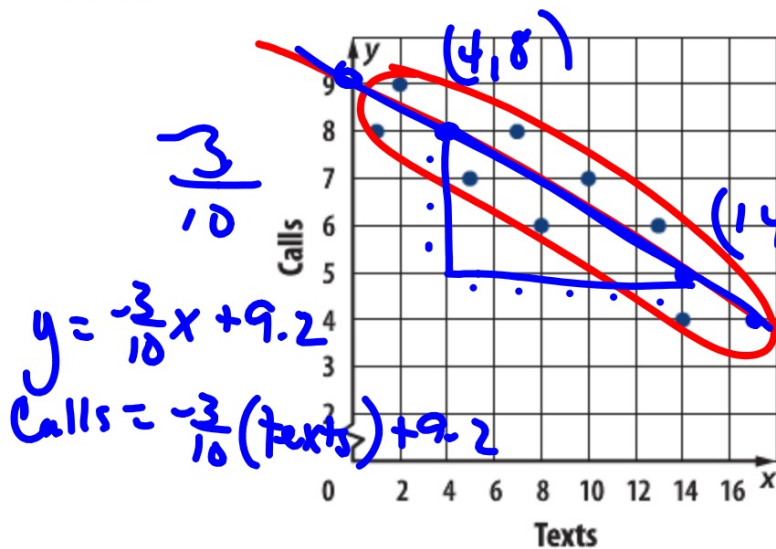
Test Ch. 4 Tues.

There will be graphing calculator question(s) on the test

whiteboards

Example 6

The scatter plot displays the number of texts and the number of calls made daily. Write an equation for the line of fit.



$$\frac{8-5}{4-14} = \frac{3}{-10} = -\frac{3}{10}$$

$$y = mx + B$$
$$8 = -\frac{3}{10} \cdot 4 + B$$

$$8 = -1.2 + B$$
$$+1.2 \quad +1.2$$
$$\hline 9.2 = B$$

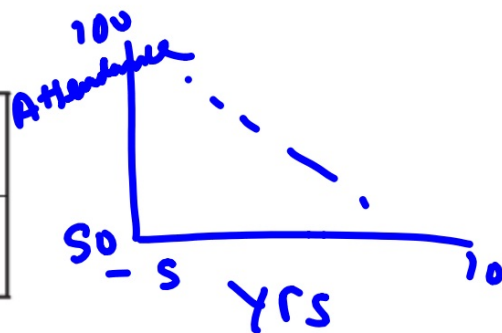
Old school

Example 7

graphing calculator

ATTENDANCE The table shows the annual attendance at an amusement park. Write an equation of the regression line for the data.

Years Since 2005	0	1	2	3	4	5	6
Attendance (thousands)	75	80	72	68	65	60	53



$$y = -4.04x + 79.68$$
$$r = -0.95$$

$$\text{attend} = -4.04\text{yr} + 79.68$$
$$-4.04(16) + 79.68$$

predict 2020

15.04 thousand
15,040

Example 8

Find the inverse of the relation.

$$\{(5, -3), (11, 2), (-6, 12), (4, -2)\}$$

Example 9

Find the inverse of $f(x) = \frac{1}{4}x + 9$.

$$X = \frac{1}{4}Y + 9$$

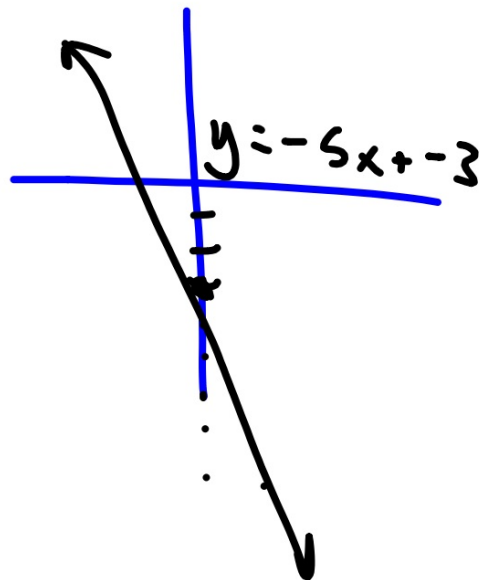
$$4. \quad x - 9 = \frac{1}{4} y$$

$$f'(x) = 4x - 36 = 4$$

Example 1

Write an equation of a line in slope-intercept form with slope -5 and y -intercept -3 . Then graph the equation.

$$y = mx + b$$
$$y = \frac{-5}{1}x - 3$$



Example 2

Write an equation of the line that passes through $(3, 2)$ with a slope of 5.

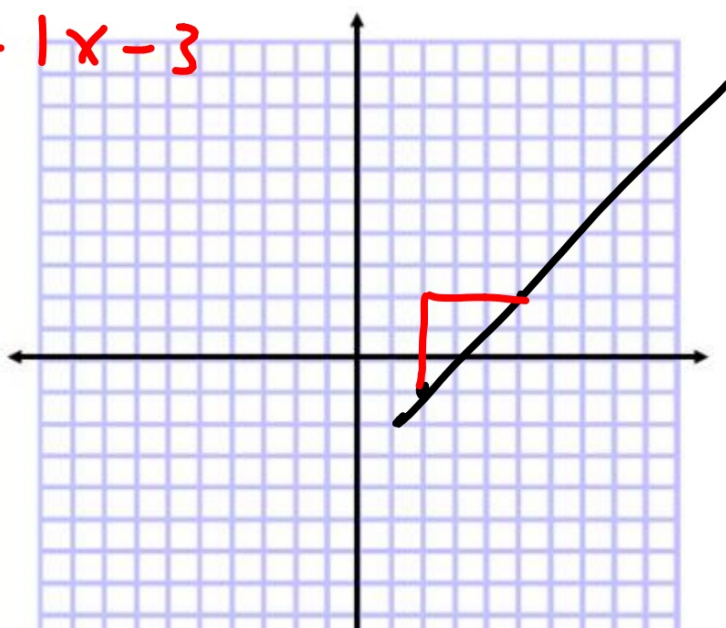
Write an equation of the line that passes through the given points. .

23. $(2, -1), (5, 2)$

24. $(-4, 3), (1, 13)$

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

$y = 1x - 3$



14. Write an equation in point-slope form for the line that passes through the point $(8, 3)$, $m = -2$. (Lesson 4-3)

$$y - 3 = -2(x - 8)$$

- 16.** Write $y + 4 = -7(x - 3)$ in slope-intercept form.
(Lesson 4-3)

23. $(0, -3); y = -2x + 4$ parallel



$$y = mx + B$$

$$-3 = -2 \cdot 0 + B$$

$$-3 = 0 + B$$

$$y = -2x - 3$$

24. $(-4, -5); -4x + 5y = -6$ perpendicular

$$5y = 4x - 6$$

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

$$y = -\frac{5}{4}x + B$$

$$-5 = -\frac{5}{4} \cdot -4 + B$$

$$-5 = 5 + B$$

$$y = -\frac{5}{4}x - 10$$

