PLAN

1. MHS Homework
2. Review Question
3. Parallel and Perpendicular Lines
4. Practice

Sep 23-4:33 PM

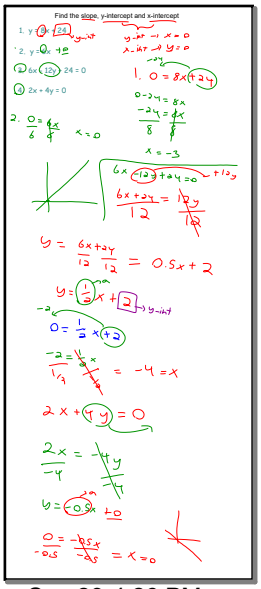
Day 2, 4, 7, 9 now in C-130

Sep 23-4:50 PM

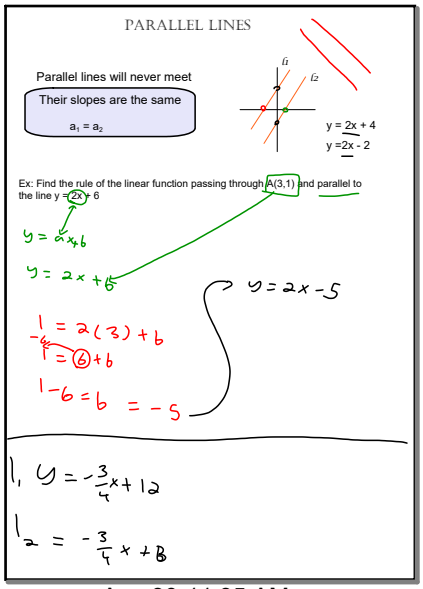
QUIZ #2 Thursday Sept 27

Test #2 Thursday Oct 11

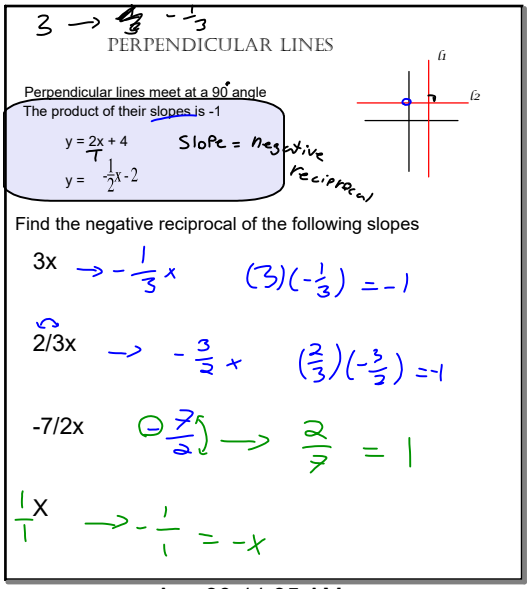
Sep 23-4:43 PM



Sep 23-4:26 PM



Aug 30-11:35 AM



Aug 30-11:35 AM

Ex: Find the rule of the linear function passing through A(6,-5) and perpendicular to the line y = 1/2x + 4

$l_1 : y = \frac{1}{2}x + 4$

$l_2 : y = \frac{-2}{1}x + B$

$-5 = \frac{-2}{1}(6) + B$

$-5 = -12 + B$

$-5 + 12 = B$

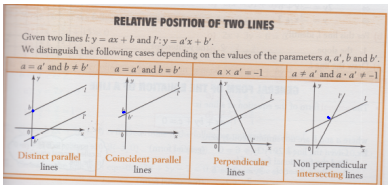
$B = 7$

$y = -\frac{2}{1}x + 7$

$y = -2x + 7$

Sep 23-4:22 PM

RELATIVE POSITION OF TWO LINES IN FUNCTIONAL FORM



ex:

In each case determine the relative position of l_1 and l_2.

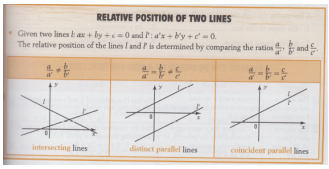
a) l_1 $y = 2x + 1$
l_2 $y = 2x - 3$ } Distinct Parallel

b) l_1 $y = 2/3x + 1$
l_2 $y = -3/2x - 1$ } Perpendicular

$\frac{5}{4}x$

Sep 15-1:46 PM

RELATIVE POSITION OF TWO LINES IN GENERAL FORM



ex:

In each of the following cases indicate the relative position of l_1 and l_2:

a) l_1 $2x + 4y + 6 = 0$
l_2 $3x + 6y + 9 = 0$

b) l_1 $2x + 3y - 6 = 0$
l_2 $3x + 4.5y + 9 = 0$

c) l_1 $2x + 3y - 3 = 0$
l_2 $3x - 2y + 6 = 0$

Sep 15-1:35 PM

$2x + 3y - 6 = 0$

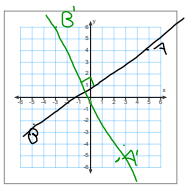
$y = -\frac{2}{3}x + 2$

$3x + 4.5y + 9 = 0$

$y = -\frac{3}{4.5}x + \frac{9}{4.5}$

Sep 25-10:34 AM

Given A(5, 4), B(-5, -2) and A'(3, -4), B'(-3, 6), four points on the Cartesian plane. What can be said about lines AB and A'B'? Justify your answer.



$a = \frac{-2-4}{-5-5} = \frac{-6}{-10} = \frac{3}{5}$

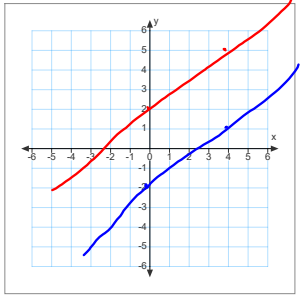
$a = \frac{y_2 - y_1}{x_2 - x_1} = \frac{(6-(-4))}{-3-3} = \frac{10}{-6}$

$-\frac{5}{3}$

$\frac{3}{5} \neq -\frac{5}{3}$

Aug 30-1:27 PM

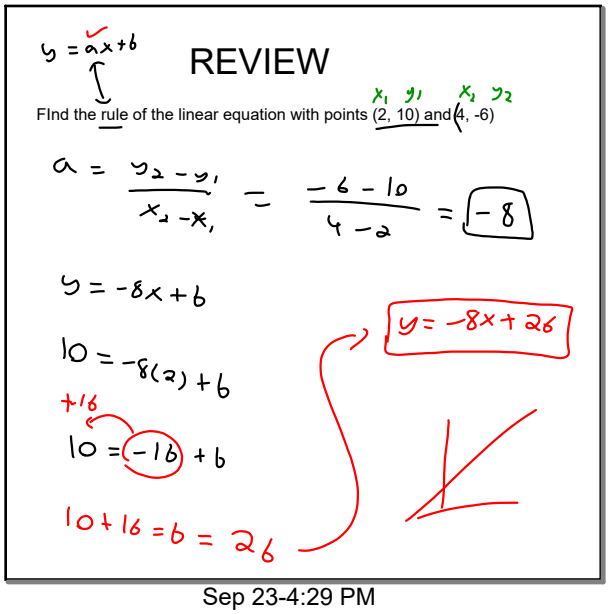
Given A(0, -2), B(4, 1), A'(0, 2) and B'(4, 5), four points on the cartesian plane. What can be said about lines AB and A'B'? Justify your answer.



$a = \frac{1-(-2)}{4-0} = \frac{3}{4}$

$a = \frac{5-2}{4-0} = \frac{3}{4}$

Aug 30-11:41 AM


y = ax + b
REVIEW
FInd the rule of the linear equation with points (2, 10) and (4, -6)
x1 y1 x2 y2
a = y2 - y1 / x2 - x1 = -6 - 10 / 4 - 2 = -8
y = -8x + b
10 = -8(2) + b
+16
10 = -16 + b
10 + 16 = b = 26
y = -8x + 26

Sep 23-4:29 PM