Announcements!

→ SKILLS TEST! (Tomorrow!)

two points → write an equation

→ Unit test (ch. 4b) Thursday, 10/23

→ Work sample assessment Tuesday, 10/21 (no need to study if you've been keeping up)

→ You need to have taken and passed Skills Tests 1 & 2 by Friday, 10/24

Identifying parallel and perpendicular lines from an equation:

→ Two lines that are parallel will have the same slope

$y = 3x + 2$

$y = 3x + 4.78126$

→ slope is 3, PARALLEL

$y = \frac{1}{2}x + 5$ — write an eq. for a parallel line:

$y = \frac{1}{2}x + 6$

→ Two lines that are perpendicular will have slopes that are negative reciprocals

$\frac{a}{b} \rightsquigarrow \frac{-b}{a}$

$\frac{2}{3} \rightsquigarrow -\frac{3}{2}$

$4 \rightsquigarrow -\frac{1}{4}$

$-\frac{1}{3} \rightsquigarrow 3 \rightsquigarrow -\frac{1}{3}$

$y = -\frac{4}{3}x + 6$

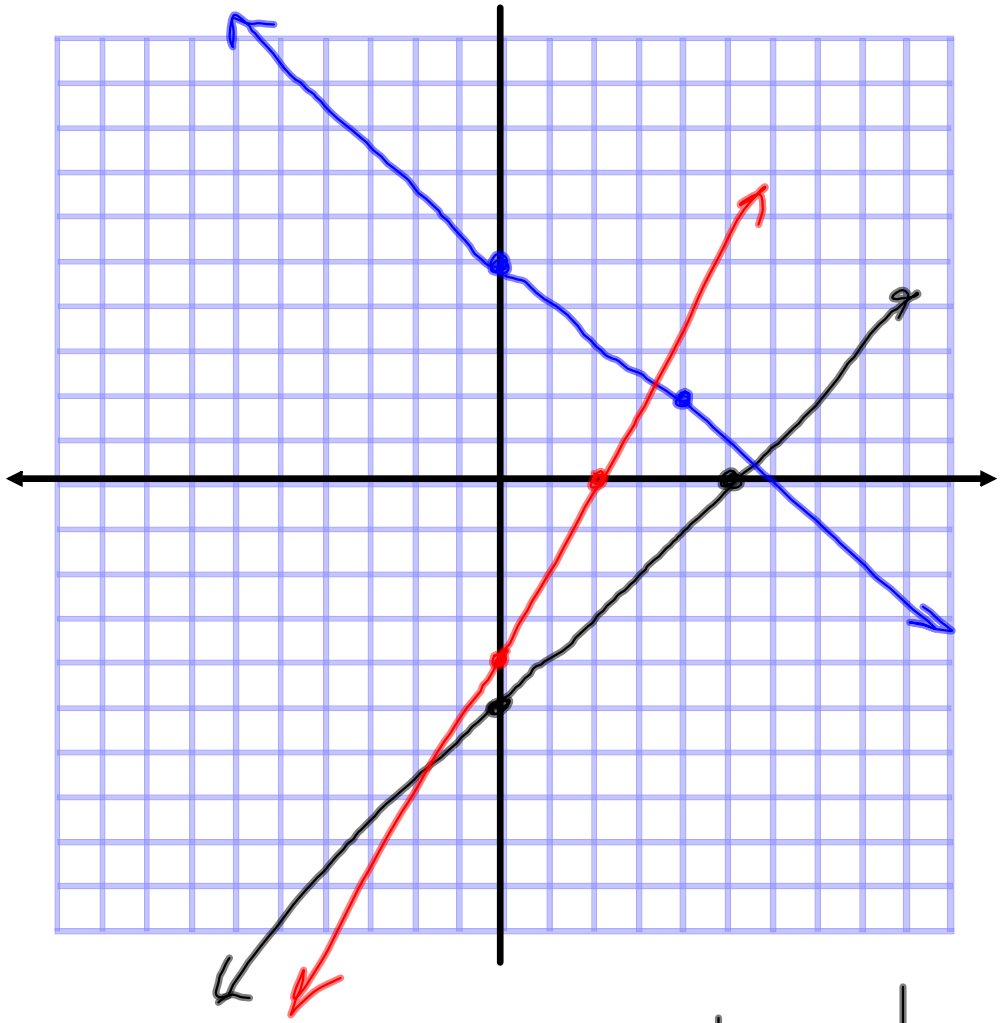
$y = \frac{3}{4}x + 11$

→ these two lines are perpendicular

($-\frac{4}{3}$ is the negative reciprocal of $\frac{3}{4}$)

$y = -2x + 4$ → write the eq. of a line that is perp.

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



math-o!

(2,7) (4,6)

$m=\frac{2}{3}$ (3,-3)

m=2 (5,1)

$m=\frac{-2}{3}$ b=-3

(1,4) (2,7)

m=-4 (1,1)

$m=\frac{-2}{3}$ b=1

(10,-5) (-5,1)

Homework - complete "slope leq." worksheet

don't graph