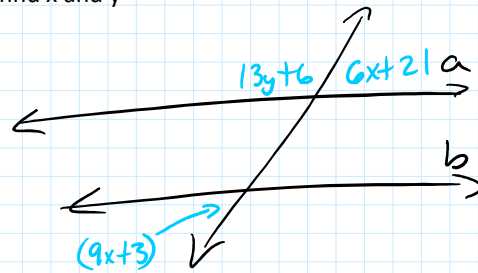
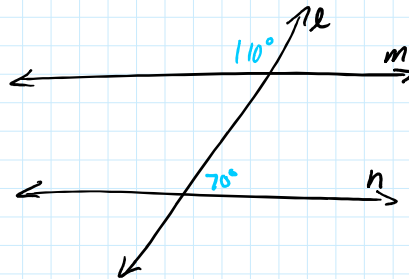

If line a is parallel to line b, find x and y



(3?)

Is line m parallel to line n (yes or no)? If yes, what theorem did you use?



(2?)

Find the shortest distance from point A (2,6) and the line $y=-x+4$

Find the shortest distance from point A (-9,-3) and the line $y=x-6$

(1?)

Write an equation of a line passing through (4,6) and is parallel to $y=3x+4$

(2?)

Write an equation of a line perpendicular to $2x-6y=12$ and passes through (-1,3).

(2?)

Determine if the two lines are parallel, perpendicular, or neither. You must show your work!!!

$$2x-5y=12 \quad \text{and} \quad -10y+4x=24$$

Line 1 contains the points: (1,2) and (3,4)
Line 2 contains the points: (-1,2) and (-3,4)

200's
