6.2

February 18, 2016

Skills 6.1

Solve the following system. Justify your answer.

$$\begin{cases} y = \frac{-3}{5}x + 10 \\ y = \frac{-3}{5}x - 13 \end{cases}$$

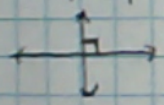
$-\frac{3}{5}x + 10 = -\frac{3}{5}x - 13$

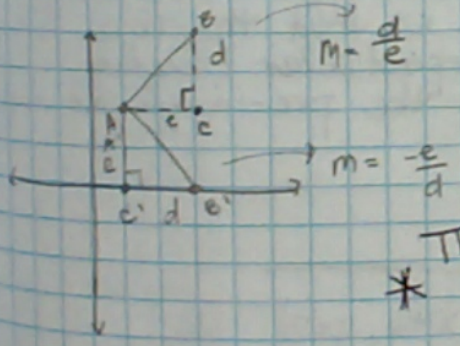
$+\frac{3}{5}x \quad\quad +\frac{3}{5}x$

$10 \neq -13$

No solution
same slope
parallel

* Horizontal ⊥ Vertical lines are perpendicular





* The slope of perpendicular lines are opposite reciprocals

Example: $y = \boxed{\frac{-2}{3}}x + 4$

⊥ line → $y = \boxed{\frac{3}{2}}x + 4$