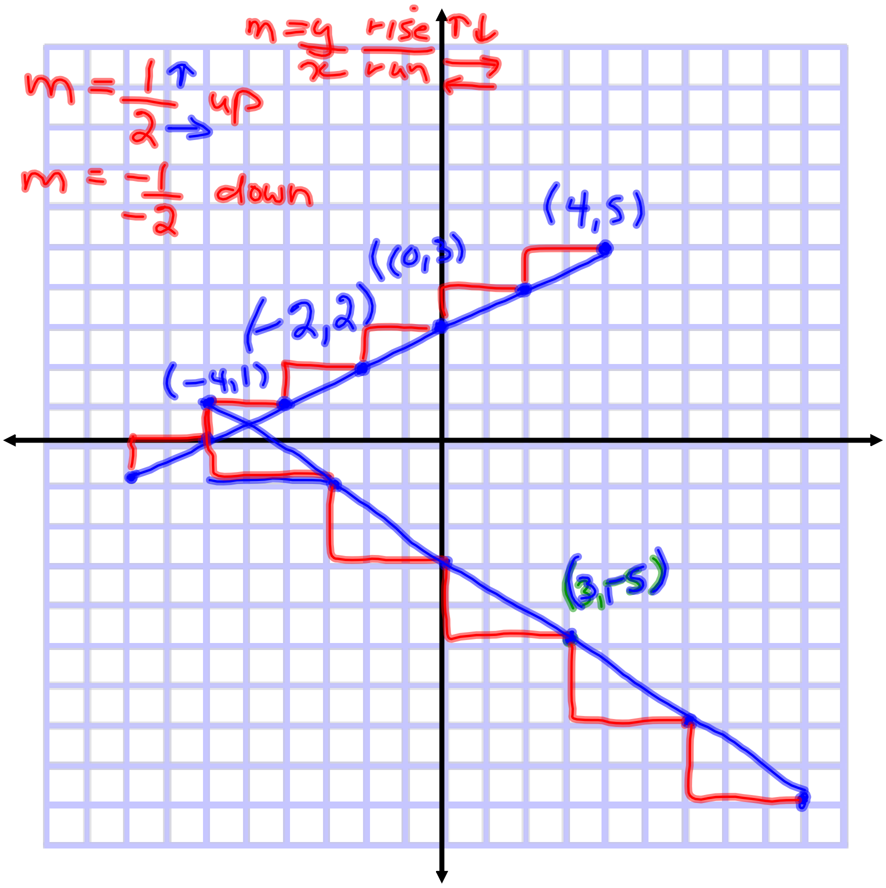
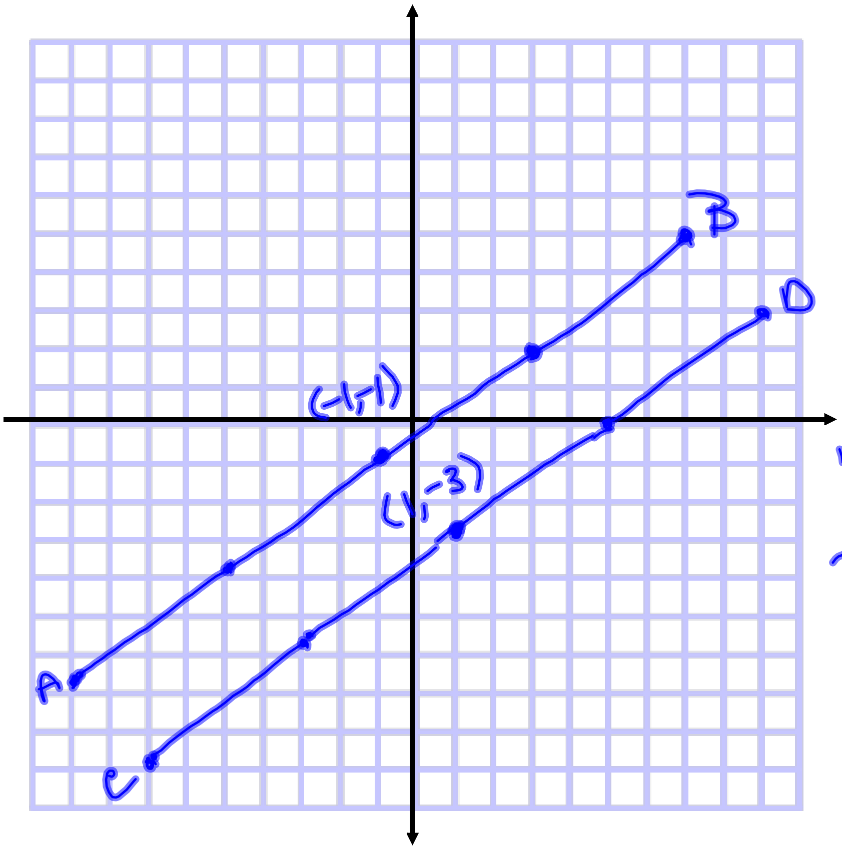


$m = \frac{-2}{3}$ ↓ → $\frac{y}{x}$

OR

$m = \frac{2}{-3}$ ↑ ← $\frac{y}{x}$

$m = \frac{y}{x}$ $\frac{\text{rise}}{\text{run}}$ ↑↓ ⇄



$m = \frac{3}{4}$ or $\frac{-3}{-4}$ (line)

Parallel Slope

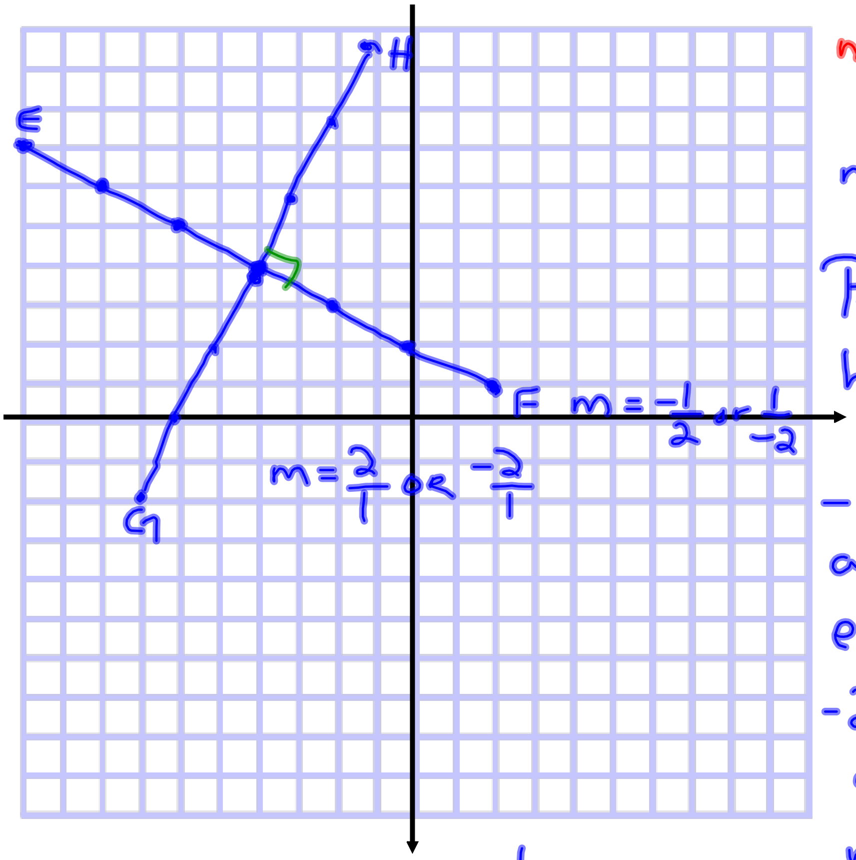
* same slope

$m = \frac{3}{4} \parallel \frac{3}{4}$ ← parallel

$m_{\overline{AB}} \parallel m_{\overline{CD}}$ ← parallel

slope of line segment AB

slope of line segment CD



$m = \frac{y}{x}$ $\frac{\text{rise}}{\text{run}}$ ↑↓ ⇄

$m = -\frac{1}{2}$ or $\frac{1}{-2}$

Perpendicular lines have negative reciprocal slopes

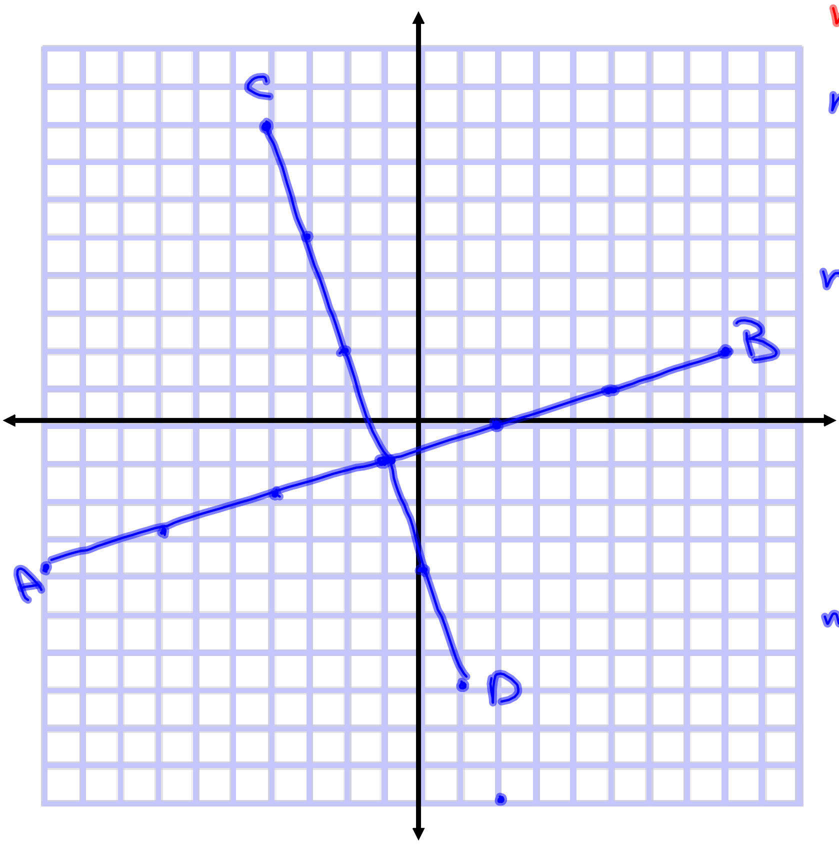
- when the slopes are multiplied, they equal -1.
- 2 lines intersect at 90° (right angle)

$m = -\frac{1}{2}$ (negative) ⊥ (perpendicular) $\frac{2}{1}$ (positive)

$m_{\overline{EF}} \perp m_{\overline{GH}}$

Proof $-\frac{1}{2} \times \frac{2}{1} = \frac{-2}{2} = \boxed{-1}$

multiply both slopes & get -1 ... ⊥



$m = \frac{y}{x}$ $\frac{rise}{run}$ ↑↓ ⇄

$m_{\overline{AB}} = \frac{1}{3}$

⊥

$m_{\overline{CD}} = \frac{-3}{1}$

$m_{\overline{AB}} = \frac{1}{3}$ or $\frac{-1}{-3}$

$m_{\overline{CD}} = \frac{-3}{1}$ or $\frac{3}{-1}$

$m_{\overline{AB}} \perp m_{\overline{CD}}$

Proof → $\frac{1}{3} \times \frac{-3}{1} = \frac{-3}{3} = -1$

Right	wrong
A) $\frac{3}{4} \parallel \frac{3}{4}$	B) $\frac{-2}{3} \perp \frac{2}{3}$
c) $\frac{-2}{5} \perp \frac{5}{2}$	D) $\frac{1}{2} \parallel \frac{-1}{2}$

$-\frac{10}{10} = -1$