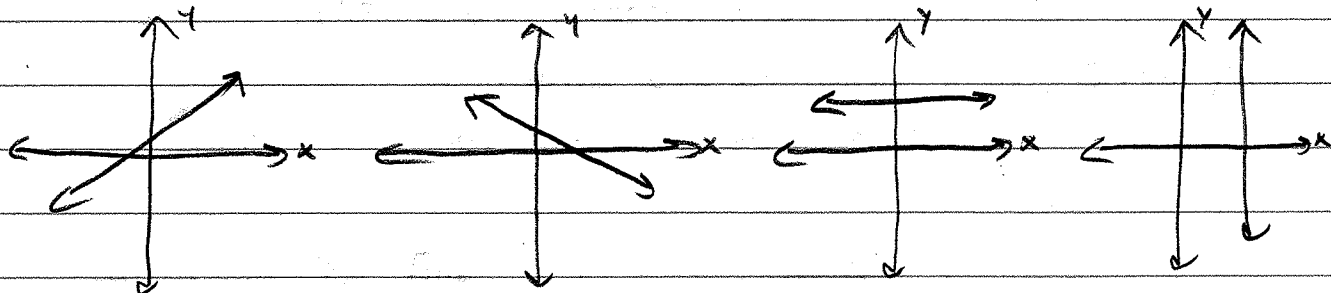


3.4b More with Slope

+, -, 0, undef slope

Slope is $\frac{\text{Change in } y}{\text{Change in } x} = \frac{y_1 - y_2}{x_1 - x_2}$



positive slope
(Rises)

Negative slope
(Falls)

0 slope
(horizontal)
 $\frac{0}{any\#} = 0$

Undefined slope
(vertical)
 $\frac{any\#}{0} = \text{undef}$

Parallel lines have the same slope

ex. $m = \frac{4}{3}$, $||m = \frac{4}{3}$

Perpendicular lines have slopes that are reciprocals & opposite sign

ex. $m = \frac{5}{8}$, $\perp m = -\frac{8}{5}$

p175: 2-6, 16-18, 39, 40