



## Perpendicular and Parallel Lines

\* Slope of a perpendicular =  $-\frac{1}{m}$

\* Parallel Lines have the same slope.

Find the perpendicular slope of each

Ex1)  $m = 2$

Ex2)  $m = \frac{1}{2}$

Ex3)  $m = -\frac{3}{2}$

Ex4)  $m = -3$

Which graphs are parallel and perpendicular?

Ex5)

a)  $y = 5x - 3$

b)  $x + 5y = 2$

c)  $-10y - 2x = 0$

Ex6) Write an equation of a line passing through  $(-3, -5)$  that is parallel to  $y = 3x - 1$

a) Parallel

b) Perpendicular

Ex7) Write an equation of a line passing through  $(-3, -5)$  that's perpendicular to  $y = 3x - 1$

a) Parallel

b) Perpendicular