

## 6.2 Perpendicular and Parallel Lines

\* Parallel lines have the same

ex. Determine which line segments are parallel

- EF passes through E(-4, -3) and F(0, 3)
- PQ passes through P(-3, -5) and Q(2, 3)
- RS passes through R(0, -3) and S(4, 3)

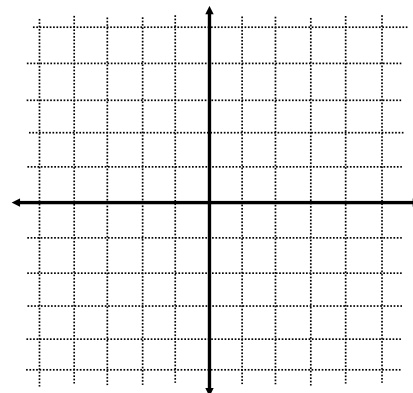
$m_{EF} =$

$m_{PQ} =$

$m_{RS} =$

\* What is the relationship between two perpendicular lines? Draw two sets of perpendicular lines... what do you notice?

ex.



$m_{AB} =$

$m_{CD} =$

\* Perpendicular lines have slopes that are

ex. -3

ex. Determine the slope of a line that is perpendicular to a line that passes through  $A(-2, 3)$  and  $B(1, -2)$ , the equation for slope is

ex. Is ABCD a parallelogram? Justify your answer.

