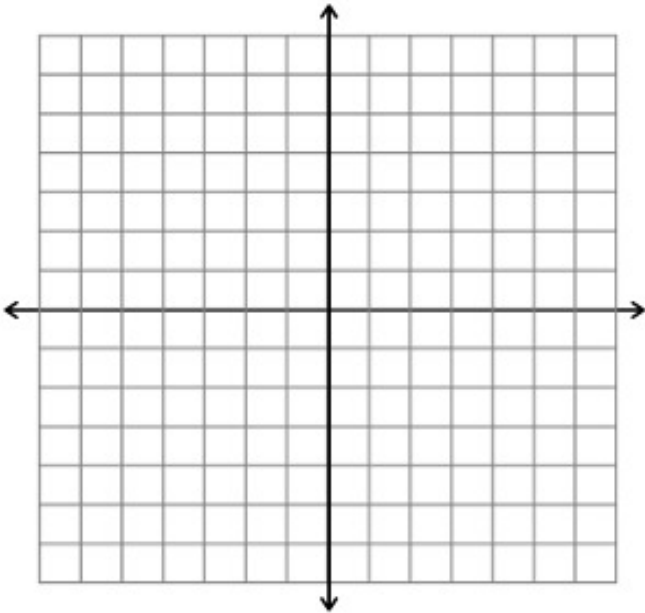


Sec. 6.2 – Slopes of Parallel and Perpendicular Lines

1. Line EF passes through $E(-3, -2)$ and $F(-1, 6)$.
Line CD passes through $C(-1, -3)$ and $D(1, 7)$.
Line AB passes through $A(-3, 7)$ and $B(-5, -2)$.
Sketch the lines. Are they parallel? Justify your answer.

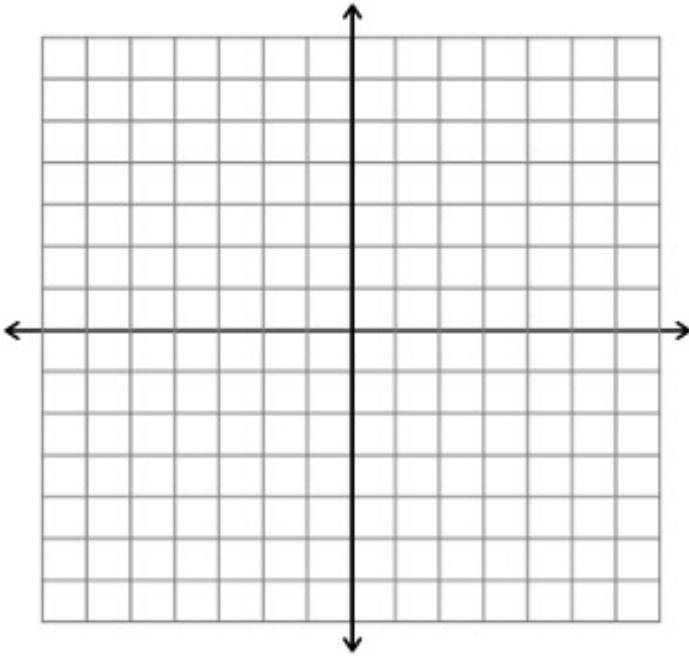


2. Line ST passes through $S(-2, 7)$ and $T(2, -5)$.

Line UV passes through $U(-2, 3)$ and $V(7, 6)$.

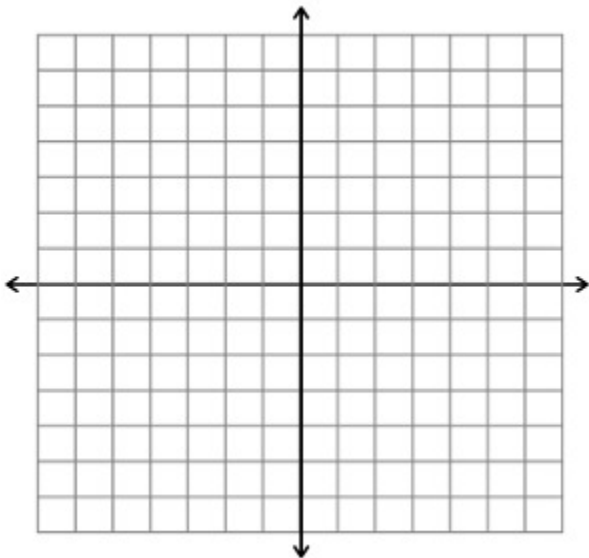
a) Are these two lines parallel, perpendicular, or neither? Justify your answer.

b) Sketch the lines to verify your answer to part a.



3. a) Determine the slope of a line that is perpendicular to the line through $G(-2, 3)$ and $H(1, -2)$.

b) Determine the coordinates of J so that line GJ is perpendicular to line GH .



4. EFGH is a parallelogram.
Is it a rectangle? Justify your answer.

