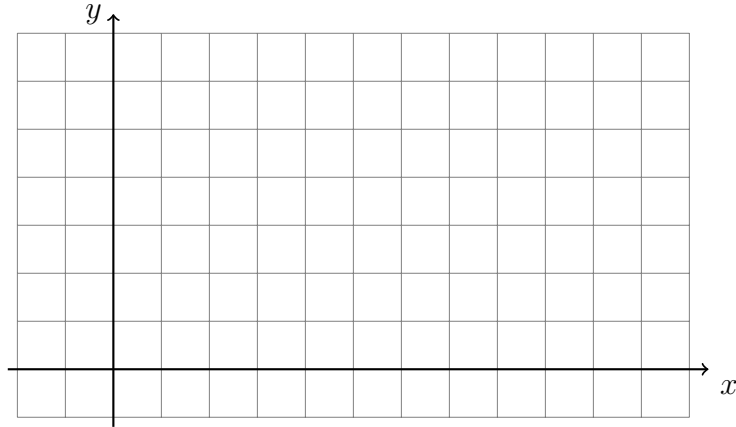


Do Now: Graphing the features of a parallelogram

1. Given parallelogram $SNOW$ with $S(2, 1)$, $N(7, 1)$, $O(10, 5)$, $W(5, 5)$

- (a) Sketch $SNOW$, labeling the vertices.



- (b) Find the area of the parallelogram.

- (c) Find the length of each side of the parallelogram.

- (d) Find the slopes of the diagonals, \overline{SO} and \overline{NW} .

- (e) Are the diagonals parallel, perpendicular, or neither? Justify your answer.