6.7 Exit ticket: Midpoint graphs and the midpoint formula
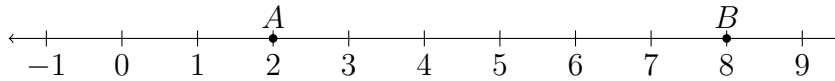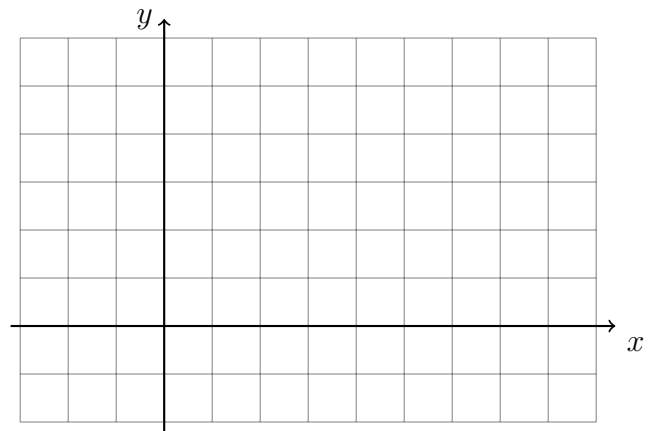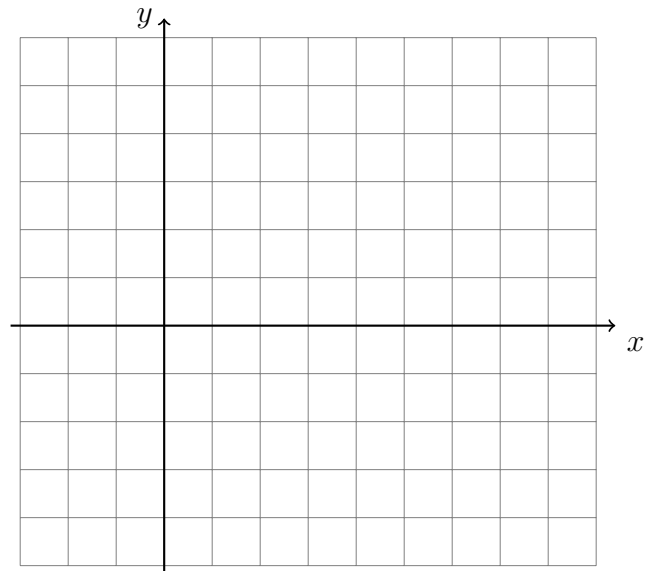
1. Given $\overleftrightarrow{AB}$ as shown on the number line, with $A = 2$ and $B = 8$. Mark and label the midpoint M between A and B?

2. On the graph below, draw $\overline{AB}$, with $A(-1, 4)$ and $B(5, -2)$, labeling the end points. Determine and state the coordinates of the midpoint M of $\overline{AB}$ and mark and label it on the graph.

3. On the graph below, draw $\overline{AB}$, with $A(1, 2)$ and $B(7, 4)$, labeling the end points. Determine and state the coordinates of the midpoint M of $\overline{AB}$ and mark and label it on the graph.

Early finishers

4. Graph and label the two equations. Mark their intersection as an ordered pair.

   $y = x + 7$ $\qquad\qquad\qquad\qquad\qquad\qquad$ $4x + 5y = -10$

   Are the lines parallel, perpendicular, or neither? Justify your answer.