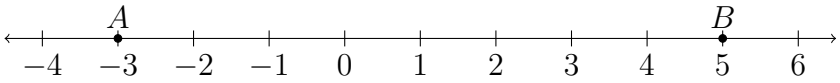
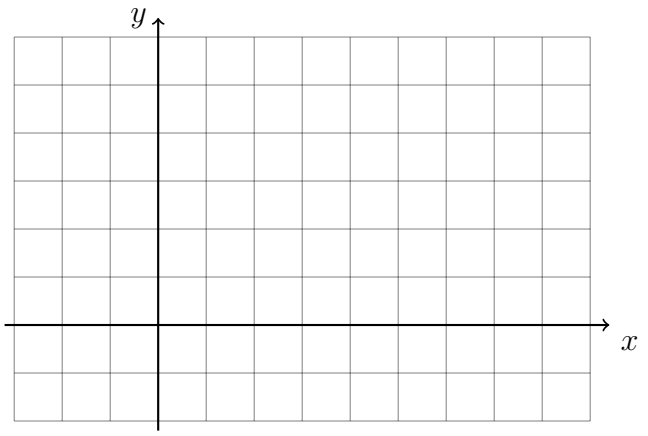
**6.7 Classwork: Midpoint graphs and the midpoint formula**

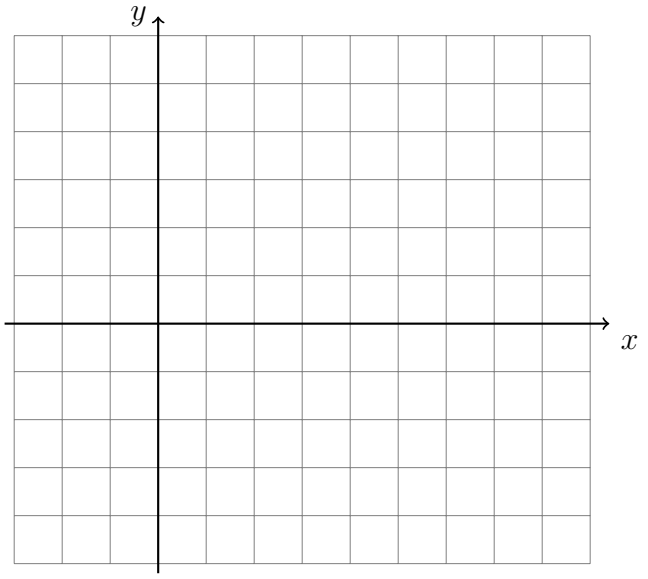
1. Given $\overleftrightarrow{AB}$ as shown on the number line, with $A = -3$ and $B = 5$. Mark and label the midpoint $M$ between $A$ and $B$?



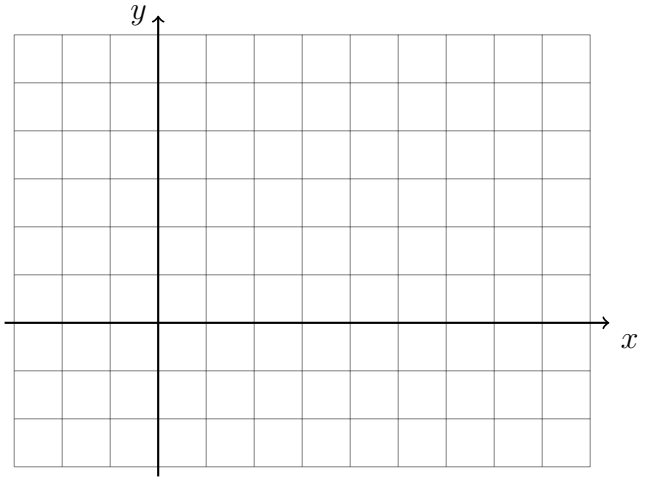

2. On the graph below, draw $\overline{AB}$, with $A(2, 3)$ and $B(8, 3)$, labeling the end points. Determine and state the coordinates of the midpoint $M$ of $\overline{AB}$ and mark and label it on the graph.



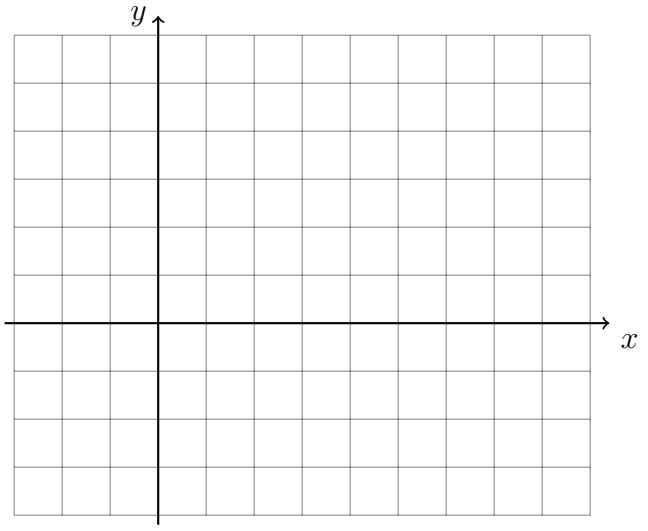

3. On the graph below, draw $\overline{AB}$, with $A(1, 2)$ and $B(7, 4)$, labeling the end points. Determine and state the coordinates of the midpoint $M$ of $\overline{AB}$ and mark and label it on the graph.



4. On the graph below, draw $\overline{AB}$, with $A(-1, 3)$ and $B(5, 1)$, labeling the end points. Determine and state the coordinates of the midpoint $M$ of $\overline{AB}$ and mark and label it on the graph.




5. On the graph below, draw $\overline{AB}$, with $A(3, -3)$ and $B(7, 5)$, labeling the end points. Determine and state the coordinates of the midpoint $M$ of $\overline{AB}$ and mark and label it on the graph.




6. Use the midpoint formula to find the midpoint of $A(4, 10)$, $B(12, 2)$.