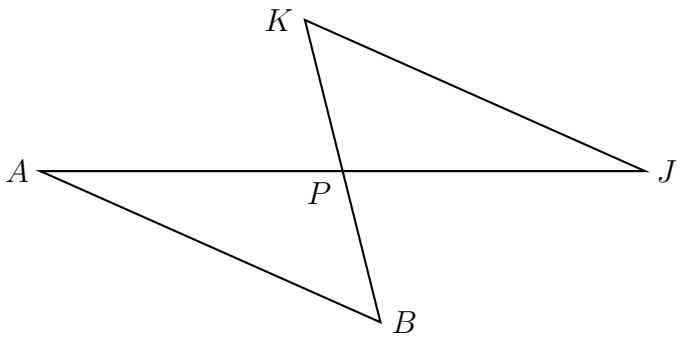
Do Now: Triangle congruence proofs

1. Given $\triangle ABP$ and $\triangle JKP$ with $\angle B \cong \angle K$. P bisects $\overline{AJ}$. Prove $\triangle ABP \cong \triangle JKP$.



Statement	Reason
1) $\triangle ABP$, $\triangle JKP$	1) Given
2) _____	2) Given
3) _____	3) Given
4) $\angle APB \cong \angle JPK$	4) _____
5) _____	5) Definition of a bisector
6) $\triangle ABP \cong \triangle JKP$	6) _____

2. $M(5, 5)$ is the midpoint of AB. Given $A(2, 3)$, find the other endpoint, B.

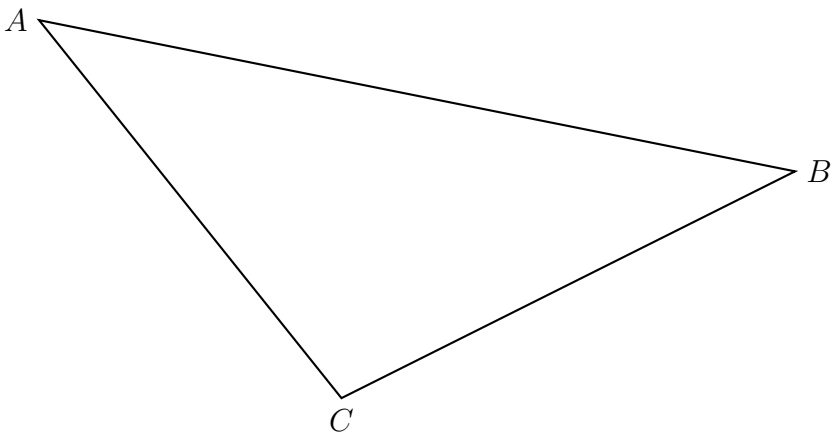
3. The line l has the equation $y = \frac{1}{2}x - 3$.
   (a) What is the slope of the line k, given $k \parallel l$?

   (b) What is the slope of the line m, given $m \perp l$?

4. A translation maps $A(5, 2) \rightarrow A'(-2, 3)$. What is the image of $B(-1, 5)$ under the same translation?

Early finishers

5. Using a compass and straightedge, construct the median to side $\overline{AB}$ in $\triangle ABC$ below. (Leave all construction marks.)



6. With a compass and straightedge, construct a square inscribed in circle Q. (Leave all construction marks.)