Draw a Translation

Construct the line parallel to a given line $AB$ through a given point $P$.

Step 1: Draw circle $P$: Center $P$, radius $\overbar{AB}$.

Step 2: Draw circle $B$: Center $B$, radius $\overbar{AP}$.

Step 3 Label the intersection of circle $P$ and circle $B$ as $Q$.

Step 4 Draw $\overbar{PQ}$.

*Note:* Circles $P$ and $B$ intersect in two locations. Pick the intersection $Q$ so that points $A$ and $Q$ are in opposite half-planes of line $\overbar{PB}$.




Therefore, the figure to the right, quadrilateral $BCD$ , has been translated the length and direction of vector $\vec{CC'}$. Notice that the distance and direction from each point is the same.