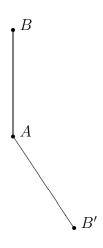
- 1. (a) In the diagram below, $\overline{AB'}$ is the image of \overline{AB} under a reflection. Find and clearly indicate the line of reflection.
 - (b) Create a dilation with scale factor 2 for \overline{AB} , labelling your answer $\overline{A''B''}$.



- 2. (a) In the diagram below, $\overline{C'D'}$ is the image of \overline{CD} under a rotation. Find and clearly indicate the center of rotation.
 - (b) Create a dilation with scale factor 1/3 for \overline{CD} above, labelling your answer $\overline{C''D''}$.

<u>C'</u> D'



- 3. For the figure at the bottom, find the following, if possible; if not possible, say so.
 - (a) A point around which A rotates 120° to land on E
 - (b) A second point around which A rotates 120° to land on E
 - (c) A second point around which A rotates 90° to land on D
 - (d) A line through which A reflects to land on D
 - (e) A line through which A reflects to land on E
 - (f) A line through which A reflects to land on G
 - (g) A point around which O rotates 60° to land on F
 - (h) A line through which \overline{IK} reflects to land on \overline{GE}
 - (i) A line through which \overline{LE} reflects to land on \overline{FA}
 - (j) A line through which \overline{JA} reflects to land on \overline{KB}

