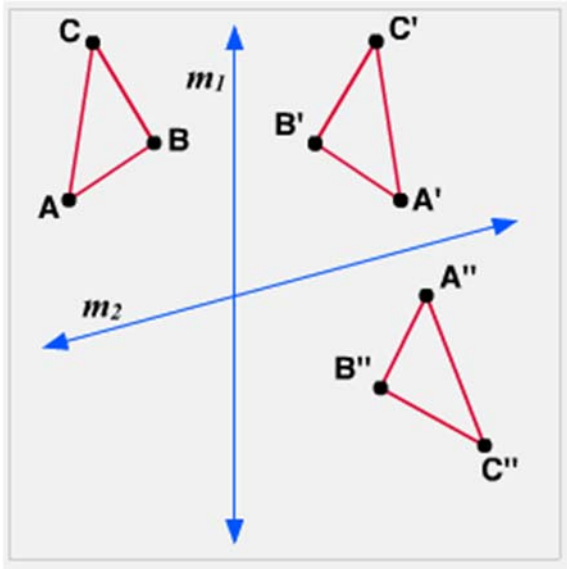


Hint: You may want to read through the “Reflections and rotations” section in Unit 2 in the Agile Mind site at “proviso.agilemind.com” as you do this assignment.

1. In the diagram, explain why $\Delta A''B''C''$ is not a translation of ΔABC .



2. What is the definition of a *rotation*?

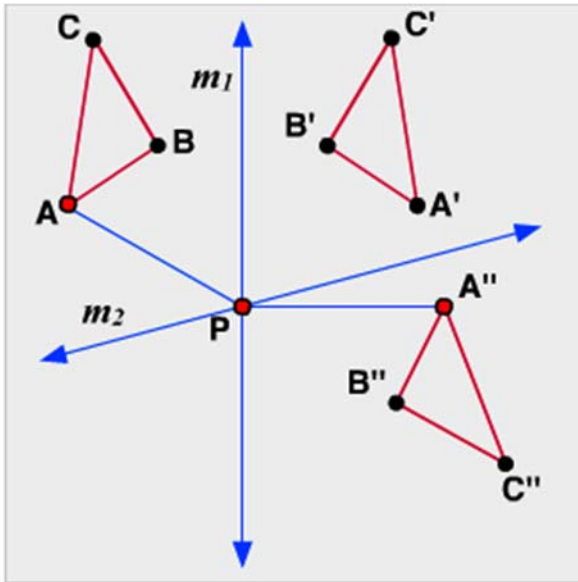
3. What is the *center of rotation*?

4. A rigid transformation preserves _____, _____,
and _____.

5. A rotation is a composition of what?

6. If the measure of the angle of rotation is 160° , then the measure of the acute angle of the intersecting line is _____ degrees.

Use the diagram below to answer problems 7 and 8.



7. Assume the measure of the acute angle between m_1 and m_2 is 70° , and $m \angle APA'' = (5x - 40)^\circ$. Solve for x .

8. Assume $PA = (4x + 3)$ and $PA'' = (2x + 11)$ centimeters. Solve for x .