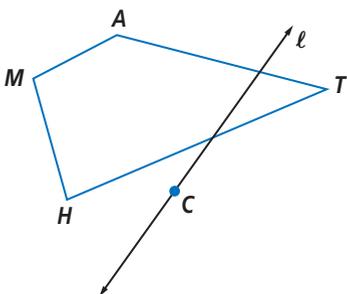
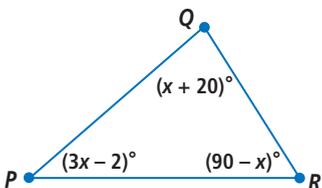


Take this test as you would take a test in class.

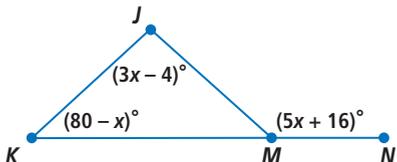
In 1 and 2, use the figure below.



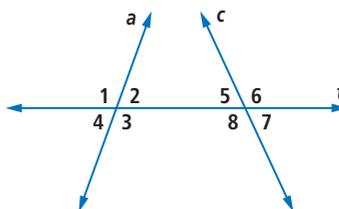
- Trace  $MATH$  and reflect it over line  $\ell$ .
- Trace  $MATH$  and rotate it  $180^\circ$  about  $C$ .
- In the figure below, find the measure of  $\angle QRP$ .



- If the measures of the angles of a triangle are in the ratio 3:4:5, what is the measure of the largest of the three angles?
- In the figure below, solve for  $x$ .



In 6 and 7, use the diagram below.



- If  $m\angle 6 = 97^\circ$  and  $m\angle 2 = 78^\circ$ , find  $m\angle 3 + m\angle 8$ .
- Multiple Choice** If  $m\angle 5 = m\angle 1$ , then lines  $a$  and  $c$  are
  - Perpendicular.
  - Parallel.
  - Intersecting and not perpendicular.
  - Cannot be determined from the given information.
- In any isosceles triangle, two of the angles have the same measure. If the measure of one angle of a particular isosceles triangle is  $114^\circ$ , find the measure of the other two angles.
- Given  $\triangle ABC$  and its reflection image  $\triangle A'B'C'$ , explain how you could find the line of reflection.
- Given  $\triangle ABC$  and its size-change image  $\triangle A''B''C''$ , explain how you could find the center of the size change.

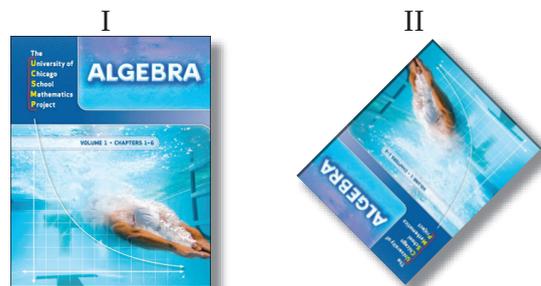
11. Consider the map below that depicts the intersections of three streets and gives the measure of two angles.



- Find the measure of angle 1.
  - Find the measure of angle 2.
12. Describe the single congruence transformation which maps figure I onto figure II.



13. Describe the similarity transformations which, put together, map figure I onto figure II.



In 14 and 15,  $T = (-4, 2)$ ,  $R = (1, -6)$ , and  $I = (5, 5)$ .

14. **Fill in the Blanks**  $\triangle T'R'I'$  is a translation image of  $\triangle TRI$ . If  $T' = (1, 1)$ , then the translation is  $(x, y) \rightarrow (\underline{\quad}, \underline{\quad})$ .
15. Graph  $\triangle TRI$  and its image under the size change  $(x, y) \rightarrow (2x, 2y)$ .