## **Lesson 54** Proofs with Triangles

- 1. 2. Definition of centroid
  - 5. A midsegment is half the length of the third side. See Theorem 46.1.
- 2. 2. Definition of midsegment
  - 3. A midsegment is parallel to the third side. See Theorem 46.1.
  - 4. A line perpendicular to one of two parallel lines is also perpendicular to the other. See Theorem 31.1.
  - 6. Definition of circumcenter
- 3. 2. Definition of bisect (or angle bisector)
  - 3. Reflexive Property
  - 4. SAS
  - 5. CPCTC (Corresponding parts of congruent triangles are congruent.)
  - 6. Definition of midpoint
  - 7. Definition of median
- **4.** 2. A midsegment is half the length of the third side. See Theorem 46.1.
  - 4. Substitution Property
  - 6. Substitution Property