Answers

- **1**. 1440°
- **2.** 1980°
- **3.** 58°; 122°; 134°; 46°
- 4. 126°; 130°; 140°; 120°; 115°; 154°; 115°
- **5.** 280°; 40°; 110°; 70°; 40°
- **6**. 80°; 100°; 65°; 115°
- **7.** 60°; 120°; 90°; 90°
- yes; The triangles have the same angle measures, 95°, 46°, and 39°.
- **9.** no; The triangles do not have the same angle measures.
- **10.** 25 sides
- **11. a.** Angles *W* and *Z* are right angles, so they are congruent. Angles *WXV* and *ZXY* are vertical angles, so they are congruent. Because two angles in $\triangle VWX$ are congruent to two angles in $\triangle YZX$, the third angles are also congruent and the triangles are similar.
 - **b**. 50 ft