## Lesson 13 Practice Problems

1. In triangle $A B C$, the measure of angle $A$ is $40^{\circ}$.
a. Give possible measures for angles $B$ and $C$ if triangle $A B C$ is isosceles.
b. Give possible measures for angles $B$ and $C$ if triangle $A B C$ is right.
2. For each set of angles, decide if there is a triangle whose angles have these measures in degrees:
a. $60,60,60$
b. $90,90,45$
c. $30,40,50$
d. $90,45,45$
e. $120,30,30$

If you get stuck, consider making a line segment. Then use a protractor to measure angles with the first two angle measures.
3. Angle $A$ in triangle $A B C$ is obtuse. Can angle $B$ or angle $C$ be obtuse? Explain your reasoning.
4. For each pair of polygons, describe the transformation that could be applied to Polygon A to get Polygon B.
a.

b.

C.

(From Unit 1, Lesson 3.)
5. On the grid, draw a scaled copy of quadrilateral $A B C D$ using a scale factor of $\frac{1}{2}$.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | $B$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $A$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

(From Unit 1, Lesson 12.)

