### Lesson 6 Practice Problems

1. On the grid, draw a scaled copy of Polygon Q using a scale factor of 2. Compare the perimeter and area of the new polygon to those of Q.
* 
1. A right triangle has an area of 36 square units.
* If you draw scaled copies of this triangle using the scale factors in the table, what will the areas of these scaled copies be? Explain or show your reasoning.

| * scale factor
 | * area (units2)
 |
| --- | --- |
| * 1
 | * 36
 |
| * 2
 |  |
| * 3
 |  |
| * 5
 |  |
| * $\frac{1}{2}$
 |  |
| * $\frac{2}{3}$
 |  |

1. Diego drew a scaled version of a Polygon P and labeled it Q.
* 
* If the area of Polygon P is 72 square units, what scale factor did Diego use to go from P to Q? Explain your reasoning.
1. Here is an unlabeled polygon, along with its scaled copies Polygons A–D. For each copy, determine the scale factor. Explain how you know.
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* (From Unit 1, Lesson 2.)
1. Solve each equation mentally.
	1. $\frac{1}{7}⋅x=1$
	2. $x⋅\frac{1}{11}=1$
	3. $1÷\frac{1}{5}=x$
* (From Unit 1, Lesson 5.)



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