### Lesson 8 Practice Problems

1. Rectangle $A$ measures 12 cm by 3 cm. Rectangle $B$ is a scaled copy of Rectangle $A$. Select **all** of the measurement pairs that could be the dimensions of Rectangle $B$.
	1. 6 cm by 1.5 cm
	2. 10 cm by 2 cm
	3. 13 cm by 4 cm
	4. 18 cm by 4.5 cm
	5. 80 cm by 20 cm
2. Rectangle $A$ has length 12 and width 8. Rectangle $B$ has length 15 and width 10. Rectangle $C$ has length 30 and width 15.
	1. Is Rectangle $A$ a scaled copy of Rectangle $B$? If so, what is the scale factor?
	2. Is Rectangle $B$ a scaled copy of Rectangle $A$? If so, what is the scale factor?
	3. Explain how you know that Rectangle $C$ is *not* a scaled copy of Rectangle $B$.
	4. Is Rectangle $A$ a scaled copy of Rectangle $C$? If so, what is the scale factor?
3. Here are three polygons.
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	1. Draw a scaled copy of Polygon A with scale factor $\frac{1}{2}$.
	2. Draw a scaled copy of Polygon B with scale factor 2.
	3. Draw a scaled copy of Polygon C with scale factor $\frac{1}{4}$.
1. In the picture lines $AB$ and $CD$ are parallel. Find the measures of the following angles. Explain your reasoning.
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	1. $∠BCD$
	2. $∠ECF$
	3. $∠DCF$
* (From Unit 1, Lesson 12.)
1. Which of these sets of angle measures could be the three angles in a triangle?
	1. $40^{∘}$, $50^{∘}$, $60^{∘}$
	2. $50^{∘}$, $60^{∘}$, $70^{∘}$
	3. $60^{∘}$, $70^{∘}$, $80^{∘}$
	4. $70^{∘}$, $80^{∘}$, $90^{∘}$
* (From Unit 1, Lesson 13.)
1. Quadrilateral A has side lengths 3, 6, 6, and 9. Quadrilateral B is a scaled copy of A with a shortest side length equal to 2. Jada says, “Since the side lengths go down by 1 in this scaling, the perimeter goes down by 4 in total.” Do you agree with Jada? Explain your reasoning.
* (From Unit 2, Lesson 2.)



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