### Lesson 10 Practice Problems

* 1. Explain how we know that triangle $ABC$ and triangle $DEF$ are similar.
	2. What does that tell us about angle $D$?
* 
	1. Find the length of $EF$.
	2. Find the measure of angle $E$.
	3. Find the measure of angle $F$.
* 
1. Decide whether triangles $ABC$ and $DEC$ are similar. Explain or show your reasoning.
* 
1. What is the length of segment $DF$?
* 
	1. 3 units
	2. $\frac{81}{4}$ units
	3. 36 units
	4. 48 units
* (From Unit 3, Lesson 9.)
1. In triangle $ABC$, angle $A$ is 75º and angle $B$ is 20º. Select the triangle that is similar to triangle $ABC$.
	1. triangle $DEF$ where angle $D$ is 75º and angle $E$ is 20º
	2. triangle $DEF$ where angle $D$ is 20º and angle $E$ is 75º
	3. triangle $DEF$ where angle $D$ is 85º and angle $E$ is 20º
	4. triangle $DEF$ where angle $D$ is 20º and angle $F$ is 85º
* (From Unit 3, Lesson 9.)
1. Sketch a pair of rectangles that are similar.
* (From Unit 3, Lesson 8.)
1. Determine if each statement must be true, could possibly be true, or definitely can't be true. Explain or show your reasoning.
	1. Two line segments are similar.
	2. Two angles are similar.
* (From Unit 3, Lesson 7.)
1. Figure $G^{′}$ is the image of Figure $G$ by a dilation.
	1. Where is the center of this dilation?
	2. Estimate the scale factor.
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* (From Unit 3, Lesson 2.)



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