Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Unit 2C Quiz Practice**

**I. Triangle Proportionality**

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| --- | --- |
| 1. Solve for the missing length. | 2. Find the missing length. |
| 3. Determine if $\overbar{EF}$ is parallel to $\overbar{QR}$See the source image | 4. Determine if $\overbar{AB}$ is parallel to $\overbar{CD}$See the source image |

**II. Dilations and Scale Factor**

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| 1. **Graph** the new image using the rule

 $\left(x,y\right)\rightarrow (\frac{3}{2}x,\frac{3}{2}y)$ and centered at the origin.1. What type of dilation was performed?

See the source image | 6. See the source image 1. Find the center of dilation.
2. Calculate the scale factor.
 |
| 7. See the source image1. Find the center of dilation.
2. Calculate the scale factor.
 | 8. a. How does perimeter change with scale factor?b. How does area change with scale factor?**III. Similar Figures**9. Solve for ED.See the source image |
| 10. What two properties must similar figures have? (HINT: something about the sides AND angles) | 11. Shawn looked at a map and saw a scale of 1 in: 3 miles. The city of Kennesaw was 3 inches from Marietta. How far away is Kennesaw from Marietta?  |
| **IV. Proving Similar Triangles**12. What are the only ways triangles can be similar?**a) State if the triangles are similar or not. B) If they are similar, complete a similarity statement.**  |
| 13.  | 14.   |