|  |  |
| --- | --- |
| 1. Triangle *JKL* is similar to triangle *MNP*.  **a.** Identify and write the corresponding sides and angles of the two triangles. | 2. Triangles *ABC* and *ADE* share angle *A* and  **a.** Show your work and determine if triangle *ABC* is similar to *ADE*. |
| 3. Carla looks from a height of 6 meters at the top of her apartment building. If the flagpole is 36 meters from the apartment building, how tall is the flagpole? *[Hint: draw the two triangles separately and in the same orientation]* | 4. Victoria holds a 4-foot-long fishing pole. The fishing line extends 7 feet to the water’s surface and then another 11.2 feet to a hook. How far is the fish from the hook? |
| 5. Triangle  is a dilation of triangle *MNO* with the center of dilation at the origin.    **a.** What is the scale factor? | 6. Given the two triangles shown.    **a.** Determine the transformation used to create triangle *XYZ*. |
| 7. Write the theorems or postulates that show the pair of triangles are congruent. | 9. Use a two-column proof.  Given:    Prove:   |  |  | | --- | --- | | Statements | Reasons | | **1.** are right angles | **1.** Given | | **2.** ? | **2.** Given | | **3.** ? | **3.** Reflexive Prop. | | **4.** | **4.** ? | | **5.** | **5.** ? | |
| 8.In the figure shown, . Which theorem can be used to prove ? |

Answers to Unit 6 Practice Test

|  |  |
| --- | --- |
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| 3. 2 meters | 4. 6.4 ft |
| 5. 3 | 6. Rotation |
| 7. HL | 9-2.  9-3. or  9-4. HL  9-5. CPCTC |
| 8. SAS |

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