

Mark corresponding angles congruent to confirm that there are two similar triangles. Write and solve an equation to find the value of each variable. Draw overlapping triangles as two separate figures.

<p>1)</p>	<p>2)</p>	<p>3)</p>
<p>4)</p>	<p>5)</p>	<p>6)</p>
<p>7)</p>	<p>8)</p>	<p>9)</p>

Determine whether the triangles are similar. If they are, write a similarity statement. Explain your reasoning.

<p>10)</p>	<p>11)</p>	<p>12)</p>
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Applications:

<p>13) Find the height of the giraffe.</p>	<p>14) Draw a diagram.</p> <p>A telephone pole 10 meters tall casts a shadow 8 meters long at the same time that a tree nearby casts a shadow 14 meters long. How tall is the tree?</p>
<p>15) A palm tree is sighted on the other side of a canyon. Find the width of the canyon.</p>	<p>16) The foot of a ladder is 1.2 m from a fence that is 1.8 m high. The ladder touches the fence and rests against a building that is 1.8 m behind the fence. Draw a diagram and determine the height on the building reached by the top of the ladder.</p>

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