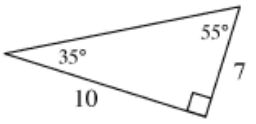
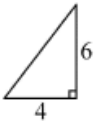
Review & Preview

4-25. Ben thinks that the slope ratio for this triangle is $\frac{7}{10}$. Carlissa thinks the ratio is $\frac{10}{7}$. Who is correct? Explain your thinking fully.

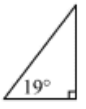


4-26. Use your observations from problem 4-24 to answer the following questions:

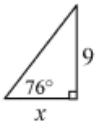
a. Thalia did not have a tool to help her find the slope angle in the triangle at right. However, she claims that the slope angle has to be more than 45°. Do you agree with Thalia? Why?



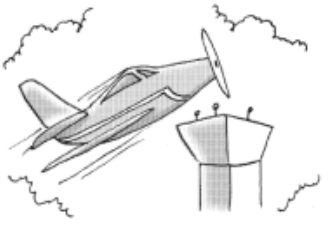
b. Lyra was trying to find the slope ratio for the triangle at right, and she says the answer is $\frac{\Delta y}{\Delta x} = 2.675$. Isiah claims that cannot be correct. Who is right? How do you know?



c. Without finding the actual value, what information do you know about x in the diagram at right?



4-27. An airplane takes off and climbs at an angle of 11°. If the plane must fly over a 120-foot tower with at least 50 feet of clearance, what is the minimum distance between the point where the plane leaves the ground and the base of the tower?



a. Draw and label a diagram for this situation.

b. What is the minimum distance between the point where the plane leaves the ground and the tower? Explain completely.

4-28. Edwina has created her own Shape Bucket and has provided the clues below about her shapes. List one possible group of shapes that could be in her bucket.

$$P(\text{equilateral}) = 1$$

$$P(\text{triangle}) = \frac{1}{3}$$

4-29. Use what you know about the sum of the angles of a triangle to find $m\angle ABC$ and $m\angle BAC$. Are these angles acute or obtuse? Find the sum of these two angles. How can we describe the relationship of these two angles?