Fill in the blanks.
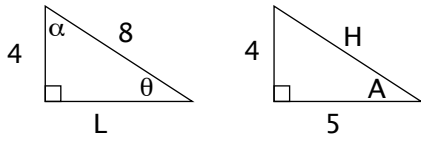
1. The reference angle for 160° is _____ .

2. The ratio hypotenuse over adjacent is called _____ .

3. 1/cot θ is the same as _____ .

4. The quadrants where cos θ is negative are _____ .

5. The length of the hypotenuse of an isosceles right triangle with a leg measurement of $5\sqrt{2}$ is _____ .

6. The terminal side of 430° lies in quadrant _____ .

Follow the directions.

7. Given the angle –221°, name the quadrant where the terminal angle stops, and give the reference angle.

8. Prove: –sin (–θ) · csc (90° – θ) · cos (–θ) = sin θ

Given the following triangles, answer the questions.

9. What is the length of side L?
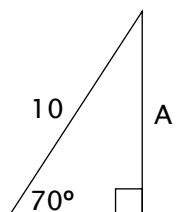
10. What is the measurement of angle θ?

11. What is the length of side H?

12. What is the measurement of angle A?

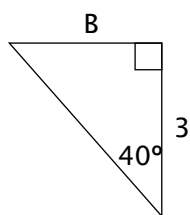Follow the directions.

13. Change the following angle measure to a decimal number: 22° 50' 45".

14. Solve for side A.

15. Solve for side B.

Fill in the chart. Make a sketch showing both angles.

	θ	reference angle	quadrant of ref. angle	sin θ	cos θ	tan θ
16.	300°					
17.	585°					

18. A building casts a shadow 100 feet long. If the angle of elevation from the farthest point of the shadow to the top of the building is 26°, what is the height of the building?