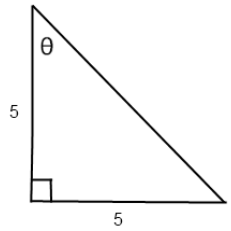
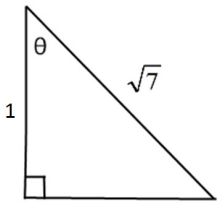
Right Triangle Trigonometry: Applications

1. Find the exact value of the six trigonometric functions of the angle θ in each figure
(Similar to p.259 #9-18)



2. Find the exact value of the six trigonometric functions of the angle θ in each figure
(Similar to p.259 #9-18)



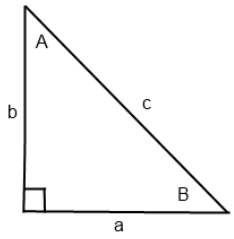
3. Find the exact value of each expression
(Similar to p.259 #19-28)

$$\tan 25^\circ - \cot 65^\circ$$

4. Find the exact value of each expression
(Similar to p.259 #19-28)

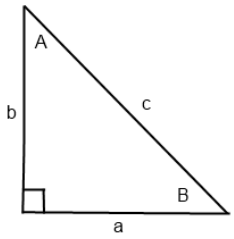
$$\frac{\cos 40^\circ}{\sin 50^\circ}$$

5. Use the right triangle show below and the information given to solve the triangle
(Similar to p.259 #29-42)



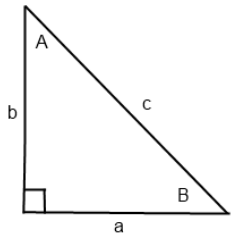
b = 3
B=15°

6. Use the right triangle show below and the information given to solve the triangle
(Similar to p.259 #29-42)



b = 5
A=25°

7. Use the right triangle show below and the information given to solve the triangle
(Similar to p.259 #29-42)



a = 3
b = 7

8. Solve the Application Problem
(Similar to p.260 #52)

A person is in a boat out in a lake. The person is looking at the top of an 80 foot building that borders the lake. If the angle of elevation is 30°, how far away from the building is the boat

9. Solve the Application Problem
(Similar to p.260 #54)

A 20 foot ladder is leaning against a building and makes a 65° angle with the ground. At what height is the ladder touching the building?

10. Solve the Application Problem
(Similar to p.260 #58)

A spotlight that is 10 feet up on a wall needs to be pointed to a spot 7 feet above the floor and 15 feet from the wall. What angle of depression should be used?