1. Find the exact value of the six trigonometric functions of the angle θ in each figure.



2. Use the right triangle shown below to solve the triangle given: b = 8, $B = 25^{\circ}$



3. Use the right triangle shown below to solve the triangle given: a = 6, b = 4



4. A 15 foot ladder leaning against a building makes a 55° angle with the ground. How far up the building does the ladder touch?

- 5. Solve each triangle: $A = 35^{\circ}$, $B = 25^{\circ}$, a = 4
- 6. Determine how many triangles there are and solve them: $A = 25^{\circ}$, a = 6, b = 7
- 7. Solve each triangle: a = 3, c = 2, $B = 15^{\circ}$
- 8. Solve each triangle: a = 5, b = 3, c = 7
- 9. Find the area of the triangle given: $A = 35^{\circ}$, b = 4, c = 8
- 10. Find the area of the triangle given: a = 5, b = 3, c = 7