## PCH CH 4 Review

Ms. Montgomery

Use the Law of Sines or the Law of Cosines to solve the following. Round your answers to the nearest tenth.

1. Solve the triangle where a = 14,  $m \angle A = 25^{\circ}$ ,  $m \angle B = 75^{\circ}$ .

2. Solve the triangle where c = 15, b = 30 and  $m \angle A = 140^{\circ}$ .

3. Solve the triangle where a = 4, b = 3,  $m \angle A = 40^{\circ}$ .

4. Solve the triangle where a = 6, b = 7 and  $m \angle C = 20^{\circ}$ .

5. Two angles of a triangle measure 32° and 53°. The longest side is 55 cm. Find the length of the shortest side.

6. A triangular-shaped lot of land has sides of length 120 m, 50 m and 150 m. What are the measures of the angles?

7. A parallelogram has sides of 6 cm and 8 cm and a 65° angle. Find the lengths of the diagonals.

8. How long is the base of an isosceles triangle if each leg is 27 cm and each base angle measures 23°?

9. A loading ramp 5 m long makes a 25° angle with the level ground. The ramp is replaced by another ramp 15 m long. Find the angle that the new ramp makes with the ground.

10. A baseball diamond is a square 90 feet on a side. The pitcher's mound is 60.5 feet from home plate. How far is it from the mound to first base?