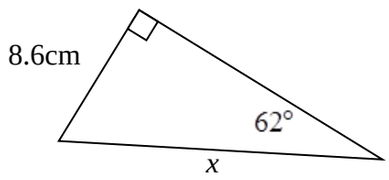
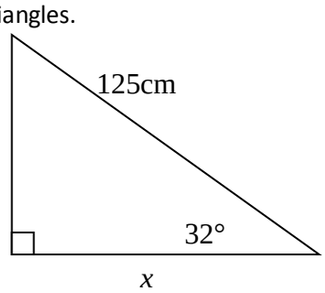
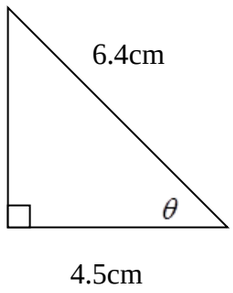
MAP 4CI **Trig Mid Unit Review** Name:_____

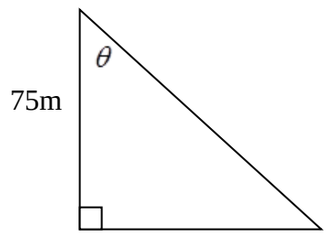
1. Find the side "*x*" to the nearest tenth in each of the following triangles.





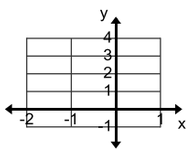
2. Find the angle θ to the nearest degree for each of the following triangles.





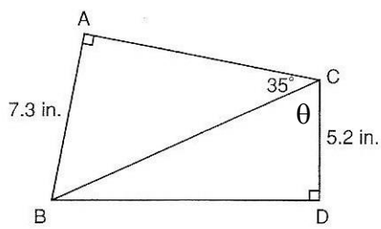
3. Solve ΔABC, a=5.0cm, b=12.0cm, angle $C = 90°$, Include a labeled diagram with your answer. (Round angles to the nearest degree and sides to nearest tenth).

4. The terminal arm of an angle, θ, in standard position passes through A(-1, 3).
   a) Determine the length of OA.



   b) Determine the 3 primary trigonometric ratios to three decimal places.

5. Determine the measure of ∠BCD.



6. For each trig. ratio below, determine whether the angle is obtuse, acute or could be either.
   a) tanA = -1.6 b) cosB = 0.9945 c) sinC = 0.35 d) cosD = - 0.7

7. Determine all possible values for angle Z (Z is between 0 and 180˚).
   a) cosZ = - 0.93 b) sinZ = 0.73

Answers: 1.a) 9.7 cm b) 106.0 cm 2. a) θ = 45° b) 38° 3. a) c = 13, A = 23°, B = 67°
4. a) $\sqrt{10}$ b) sinθ = 0.949, cosθ = -0.316, tanθ = -3 5. h = 12.7 in., θ = 66°
6. a) obtuse b) acute c) could be either d) obtuse 7. a) 158° b) 47° or 133°