College Review Math   Name _____

Review Sections 9-3 & 9-4

Round **all** answers to nearest tenth. $\dfrac{\sin A}{a} = \dfrac{\sin B}{b} = \dfrac{\sin C}{c}$

Use the Law of Sines to solve the following triangles.

1)

∠ A = _____

a = _____

c = _____

2)
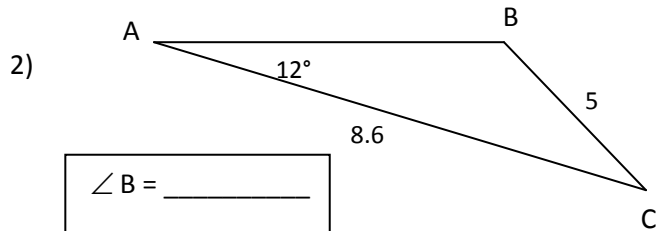
∠ B = _____

∠ C= _____

c = _____

3)   Draw and solve ΔABC if a = 9, b = 10 and ∠ B = 39°
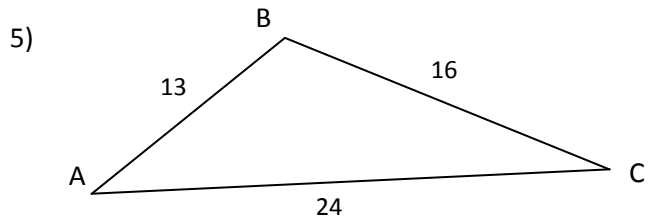
∠ A = _____

∠ C = _____

c = _____

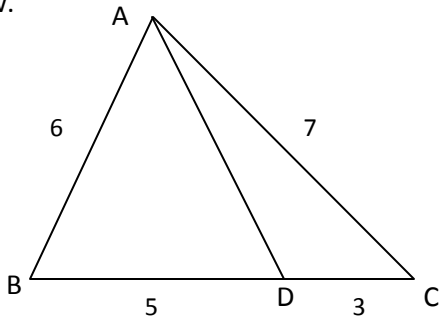Use the Law of Cosines to find the missing measurement. $c^2 = a^2 + b^2 - 2ab\cos C$

4)

c = _____

5)
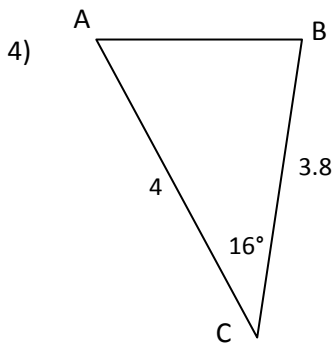
∠ B = _____

6) Find the length of AD in the diagram below.

7) Draw ΔABC, then find the length of the median from A, if a = 10, b = 12 and c = 6

Use either the Law of Sines or Cosines to solve the word problems. Make sure to make a drawing for each.

8) Buoys (B) and (C) lie south of the coast of the most southern tip of South America. They lie in a direct eastern path with buoy C being the most eastern. Bouy (C) is known to be exactly 1580 yards from the coast city of Hope (H). If a ship passes buoy B headed directly east with ∠CBH = 28° and ∠BCH = 117° draw ΔBHC and determine how far bouy (B) is from Hope (H)?

9) Lacy and Cassie are flying kites from the same location. Lacy has let out 100' of string, and her kite fly's at an angle of inclination of 80°. Cassie's kite has an angle of inclination of 70° and has 110' of string released. If both kites lie on the same vertical plane, how far apart are the kites?