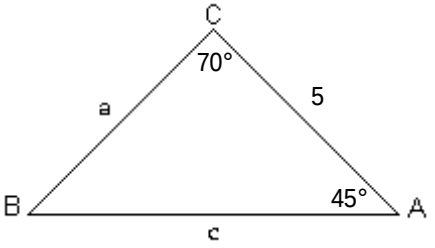
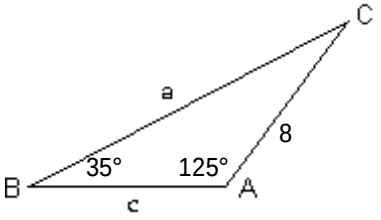
MAC1114 Trigonometry
7.1 The Law of Sines Practice 13

Solve the triangle.

1) 

A) B = 70°, a = 3.9, c = 5.18
B) B = 65°, a = 5.18, c = 3.9
C) B = 60°, a = 5.18, c = 3.9
D) B = 65°, a = 3.9, c = 5.18

1) _____

2) 

A) C = 20°, a = 11.43, c = 4.77
B) C = 15°, a = 4.77, c = 11.43
C) C = 25°, a = 11.43, c = 4.77
D) C = 20°, a = 4.77, c = 11.43

2) _____

Solve the triangle. Round lengths to the nearest tenth and angle measures to the nearest degree.

3) B = 41° C = 111° b = 35

Two sides and an angle (SSA) of a triangle are given. Determine whether the given measurements produce one triangle, two triangles, or no triangle at all. Solve each triangle that results.

4) A = 30°, a = 11, b = 22

A) B = 90°, C = 60°, c = 19.1
B) B = 60°, C = 60°, c = 19.1
C) no triangle

4) _____

5) A = 85°, a = 4, b = 5

A) B = 44°, C = 51°, c = 13
B) no triangle
C) A = 43°, C = 52°, c = 9

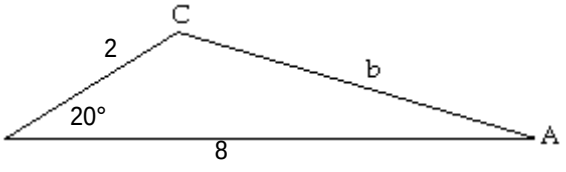
5) _____

6) C = 35°, a = 18.7, c = 16.1

A) A = 42°, B = 103°, b = 27.4
B) $A_1 = 42°, B_1 = 103°, b_1 = 27.4$;
$A_2 = 138°, B_2 = 7°, b_2 = 3.4$

6) _____

Find the area of the triangle. If necessary, round the answer to two decimal places.

7) 

A) 2.74
B) 7.52
C) 10.94
D) 5.47

7) _____

Find the area of the triangle having the given measurements. Round to the nearest square unit.

8) A = 27°, b = 14 inches, c = 5 inches

Answer Key
Testname: PRACTICE13

1) D
2) A
3) A = 28°, a = 25, c = 49.8
4) A
5) B
6) B
7) A
8) 16 square inches