

I. Draw a triangle for each problem. Decide if SSS, SAS, ASA, AAS, or SSA before doing the work. <u>Round all answers to the nearest whole number in 1-4 and 6-10.</u> <u>In problem #5 give the exact answer.</u>

1) $a=8, b=3, m < C = 30^{\circ}, c = ?$
2) b = 3, c = 5, m <a 150°,="" =="" a="?</td">
3) m <a 30°,="" <math="" =="" m<b="70°,">a = 9, b = ?
4) m <a=60°, a="?</td" b="8," m<b="40°,"></a=60°,>
5) m <a 45°,="" =="" c="<math" m<b="15°,">6\sqrt{3}, a = ? (Exact Answer)
6) m <a 35°,="" =="" a="144," b="238," m<b="?</td">
7) m <a 30°,="" 7,="" =="" a="30," b="1" m<b="?</td">
8) m <a 9°,="" =="" a="8," b="60," m<b="?</td">
9) m <a 77°10',="" =="" a="39," b="40," m<b="?</td">
10) m <a 52°,a="40," =="" b="25," m<b="?</td">
II. <u>Find the area of $\triangle ABC$. Round the answers to the nearest tenth.</u>

1)	
2)	
3)	
4)	
5)	
6)	
7)	
8)	
9)	
10)	
11)	
12)	

11) a = 8yds, b = 15yds, m<C = 68°

12) b =16ft, c = 8ft, m<B = 100°