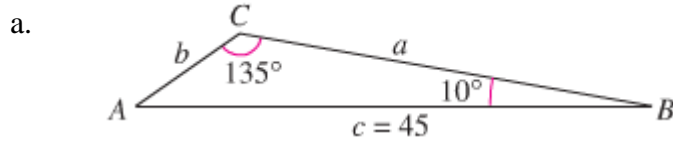


Do your work on separate paper, organize it, and then show your work, here, but *organized* !!!

1. **3.1** Use the Law of Sines to solve the triangle, if possible. There may not be a solution. There may be two solutions. There may be just one solution:



b. $A = 120^\circ$, $B = 45^\circ$, $c = 16$

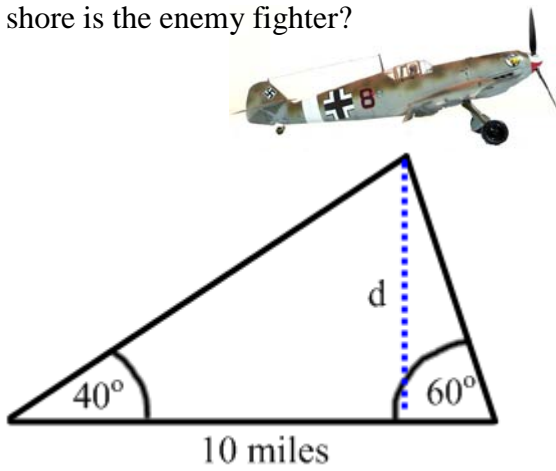
c. $A = 110^\circ$, $a = 125$, $b = 200$

d. $A = 120^\circ$, $a = 25$, $b = 24$

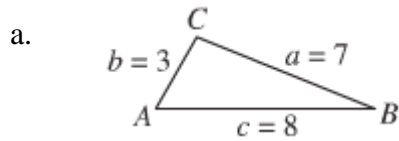
e. $A = 25^\circ 4'$, $a = 9.5$, $b = 22$

f. $A = 45^\circ$, $a = b = 1$

2. **3.1** Two observation posts are 10 miles apart on the Dover coast. Observers take a bearing on an incoming Nazi fighter plane, which gives the triangle in the diagram. How far from shore is the enemy fighter?



3. **3.2** Use the Law of Cosines to solve the triangle. Round answers to two decimal places. This takes us up to SSS and SAS. I wouldn't memorize which Law applies to what information. Instead, I would draw the triangle, see if I can solve it with Law of Sines, and then try Law of Cosines. Section 3.2 #s 27 – 32 are aimed at this skill (Sines or Cosines? Solve.)



b. $A = 48^\circ$, $b = 3$, $c = 14$

4. Find the area of the triangle:

