

AFM EXAM REVIEW : DAY 3

“LAW OF SINES, LAW OF COSINES, AREA OF NON-RT TRIANGLES”

***Round all solutions to the nearest tenths.**

1. Given $A = 50$, $a = 10$, and $B = 30$. Find side b .
2. Given $a = 13$, $b = 17$, and $c = 20$. Find the largest angle.
3. During a figure skating routine, Aiden and Stacy skated apart with an angle of 18 degrees between them. Aiden skates 35 ft and Stacy skates 25 ft. How far apart are the skater (tenths place)?
4. Two planes leave an airport at the same time. After one hour they are 189 km away from each other. One plane traveled 170 km and the other plane traveled 165 km. What is the angle from where they took off from the airport? (tenths place)
5. A ladder is leaned 12 ft up a brick wall. The ladder is 10 ft from the base of the wall. The angle of elevation from the bottom of the ladder to the top of the ladder is 30 degrees. How long is the ladder? (tenths place)
6. Find the Area of the triangle with $A=25$, $b=13$ and $c=17$.
7. Find the Area of the triangle with $a=20$, $b=24$, and $c=25$.
8. Solve: $\ln 5 + \ln x = \ln 30$
9. Solve: $\frac{1}{2} (\log 25 + \log x) = \log 45$
10. Simplify: $\frac{2x^2 - 18}{x^2 + 7x + 12}$