

Name: _____ Date: 10/13/25

Session 9 ☺

3 big things we want to look at:

- Law of Sines
- Law of Cosines
- Heron's Area Formula

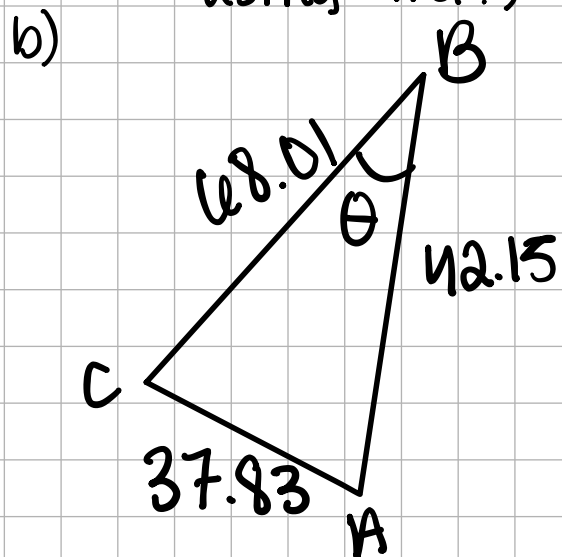
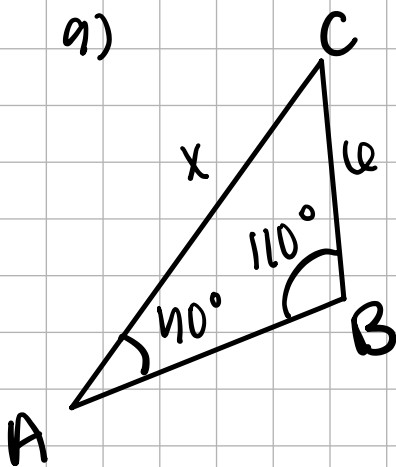
★ Law of Sines
Case 1 - ASA

Case 2 - SSA

★ Law of Cosines
Case 3 - SAS

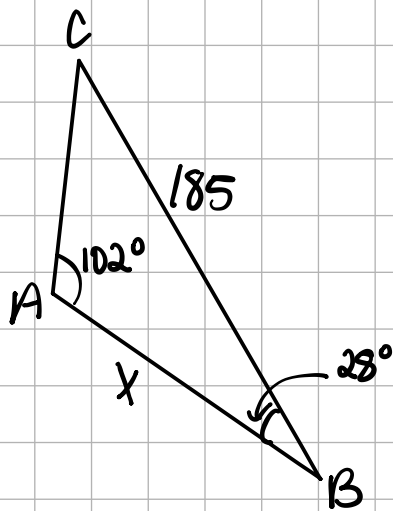
Case 4 - SSS

1. Find the missing variable in each triangle using Law of Sines or Law of Cosines (Identify which law you're using first!)

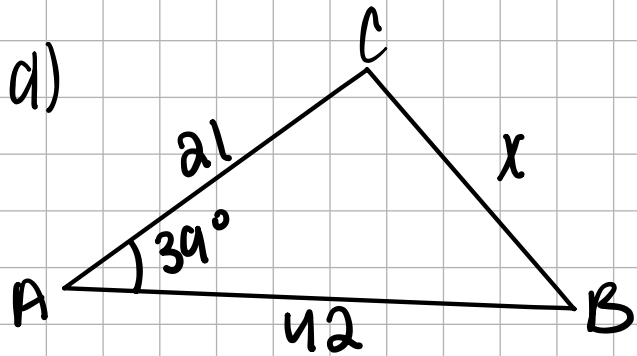


1. Continued

c)



d)



2. Solve for the missing variable, but now you draw your own triangle!

a) $\angle A = 30^\circ$, $\angle C = 65^\circ$, $b = 10$

b) $a = 28$, $b = 15$, $\angle A = 110^\circ$

c) $a = 3.0$, $b = 4.0$, $\angle C = 53^\circ$

d) $a = 20$, $b = 25$, $c = 22$

3. Find the area of the triangle whose sides have the given lengths

a) $a = 9$, $b = 12$, $c = 15$

b) $a = 7$, $b = 8$, $c = 9$

4. Find the area of the shaded figure

