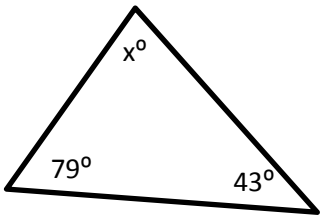
Name _____ Date_____

Geometry: Triangle Properties and Proofs

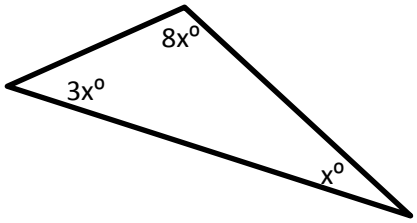
Use the Angle Sum Theorem, Exterior Angles Theorem, and the Third Angle Theorem to find missing values of the following.

1)



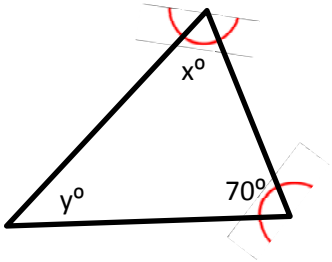
X = _____

2)



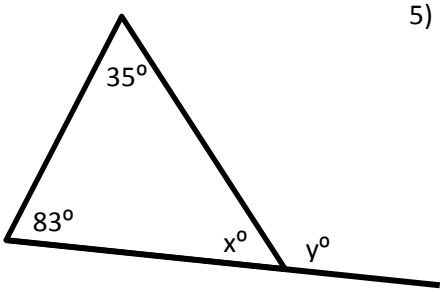
X = _____

3)



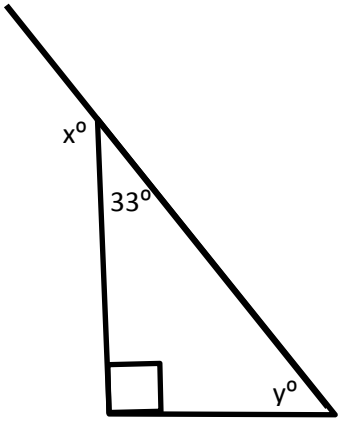
X = _____ y = _____

4)



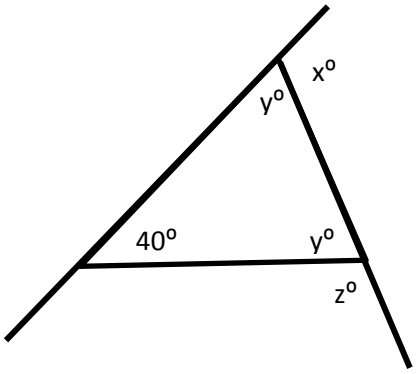
X = _____ y = _____

5)



X = ____ y = ____

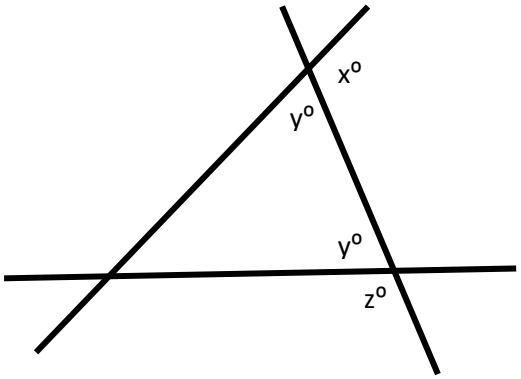
6)



X = ____ y = ____ z = ____

Challenge Problem:

Use the following diagram to prove the results for x and z on problem number 6.
(Use vertical angles, linear pairs, etc.)



Statement	Reason