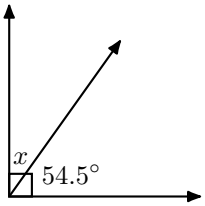
NAME: _____ DATE: _____

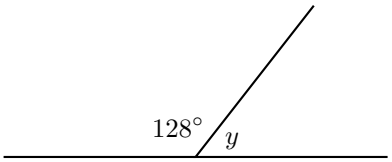
SECTION: _____ SCORE: _____

I. Solve each problem completely.

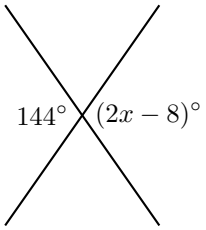
1. What is the complement of $36°$?
2. Solve for x:



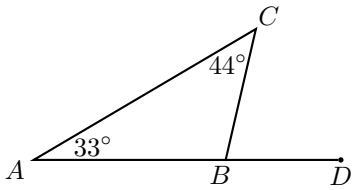
3. Find the value of y:



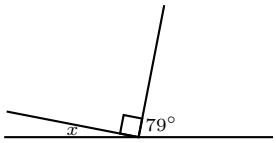
4. In ΔABC, $\angle A = 48°$ and $\angle B = 36°$. What is the measure of $\angle C$?
5. Solve for x:



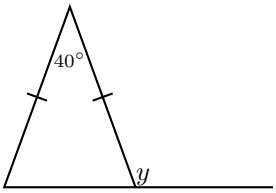
6. What is the measure of $\angle CBD$?



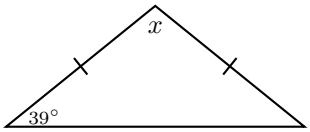
7. What is the value of x?



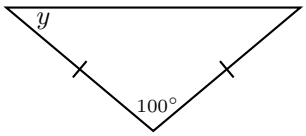
8. Solve for y:



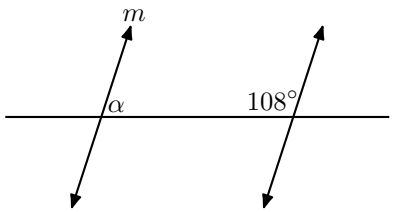
9. Solve for x:



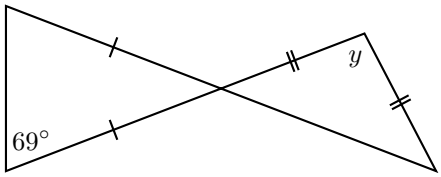
10. Solve for y:



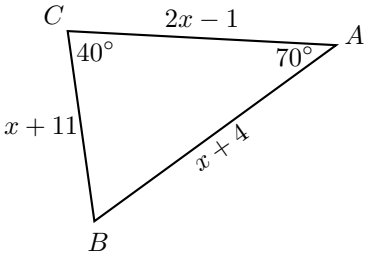
11. In the figure, if $m \parallel n$, what is the measure of $\angle\alpha$?



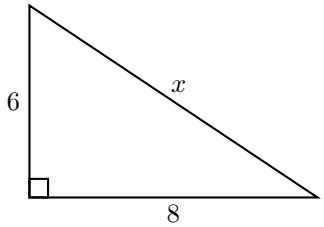
12. What is the measure of angle y?



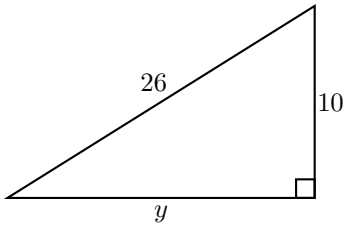
13. An exterior angle adjacent to the base of an isosceles triangle is $150°$. What is the measure of its vertex angle?
14. What is the measure of side AC?



15. Find the measure of x:

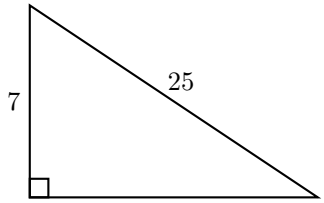


16. Find y:

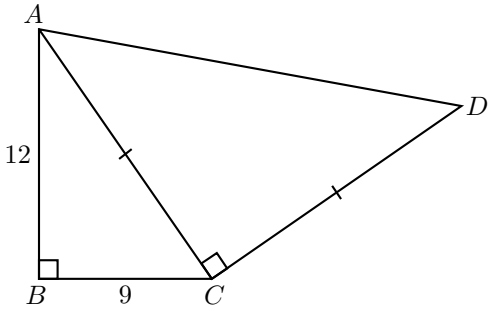


17. A 15-foot ladder is leaning against a wall. If the foot of the ladder is 9 ft away from the base of the wall, how high up the wall does the ladder reach?

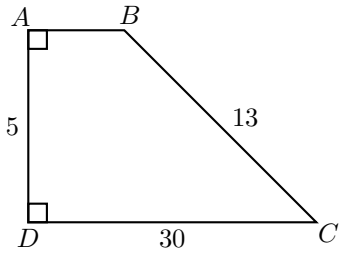
18. Find the area of the given triangle.



19. Solve for AD.

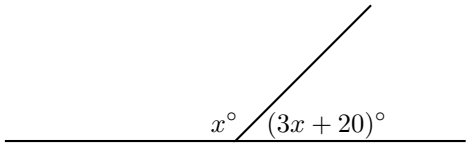


20. Solve for AB.

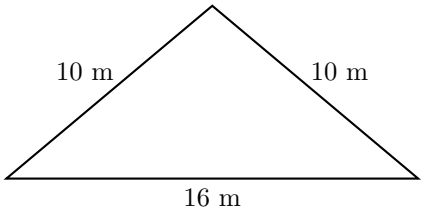


II. Show your solution.

1. Solve for x:



2. Find the area of the given triangle.



3. Two hikers started at the same location. One traveled 4 miles east and then 2 miles north. The other traveled 2 miles west and then 6 miles north. At the end of their hikes, how many miles apart were the two hikers?

4. Find the measure of $\angle ABC$.