

1. Do the following side lengths form a triangle? Explain how you know.

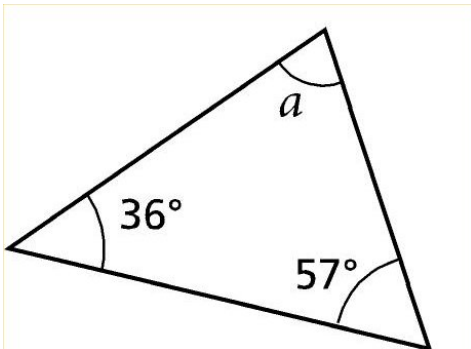
4 cm, 8 cm, 10 cm

2. Do the following side lengths form a triangle? Explain how you know.

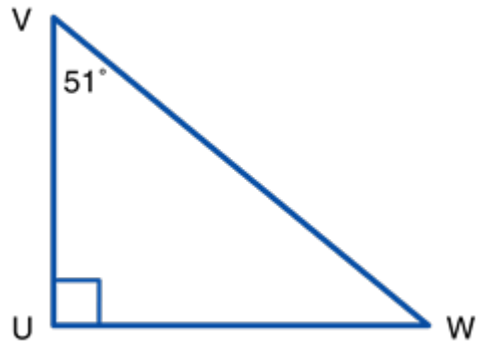
5 cm, 13 cm, 7 cm

3. In class we learned about the angle sum theorem that explains that the three angles of a triangle always add up to the same number of degrees. How many degrees do the three angles of a triangle always add up to?

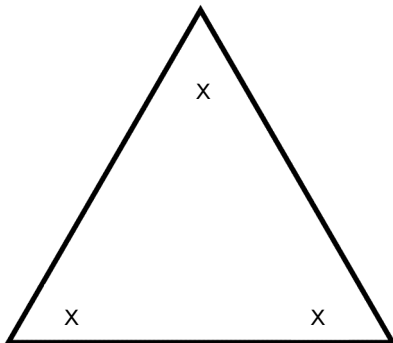
4. Find $m\angle a$.



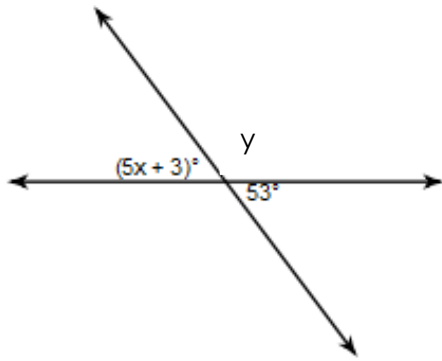
5. Find $m\angle VWU$.



6. If each angle measures x degrees, what is the value of x ? Write an equation and solve to find the value of x .



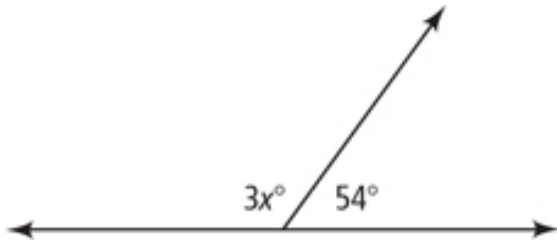
7. Find the value of x and $m\angle y$.



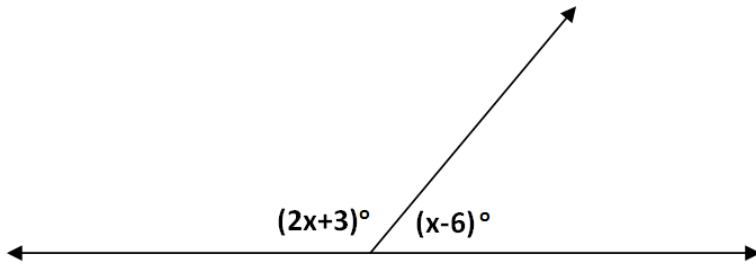
$x =$

$m\angle y =$

8. Find the value of x .



9. Find the value of x .



10. How is the relationship between supplementary angles similar to the angle sum theorem?