

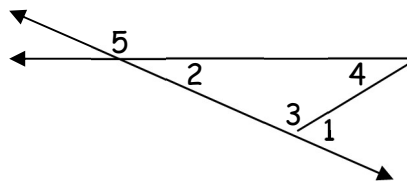
# Exterior Angles of Triangles

## Homework

Name \_\_\_\_\_

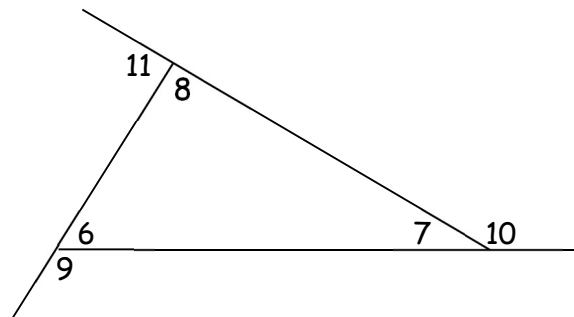
Use the figure at the right for problems 1-3.

1. Find  $m\angle 3$  if  $m\angle 5 = 130$  and  $m\angle 4 = 70$ .
2. Find  $m\angle 1$  if  $m\angle 5 = 142$  and  $m\angle 4 = 65$ .
3. Find  $m\angle 2$  if  $m\angle 3 = 125$  and  $m\angle 4 = 23$ .



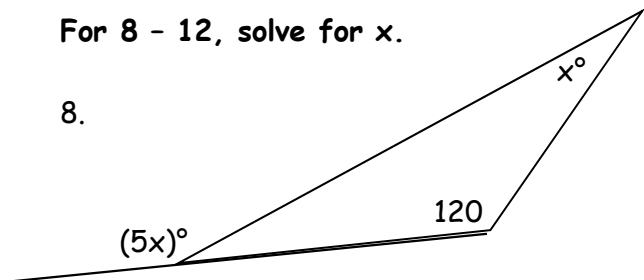
Use the figure at the right for problems 4-7.

4.  $m\angle 6 + m\angle 7 + m\angle 8 =$  \_\_\_\_\_.
5. If  $m\angle 6 = x$ ,  $m\angle 7 = x - 20$ , and  $m\angle 11 = 80$ , then  $x =$  \_\_\_\_\_.
6. If  $m\angle 8 = 4x$ ,  $m\angle 7 = 30$ , and  $m\angle 9 = 6x - 20$ , then  $x =$  \_\_\_\_\_.
7.  $m\angle 9 + m\angle 10 + m\angle 11 =$  \_\_\_\_\_.

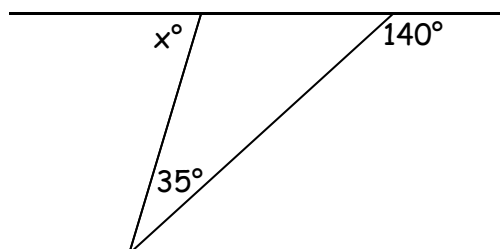


For 8 - 12, solve for  $x$ .

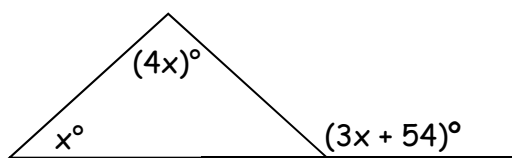
8.



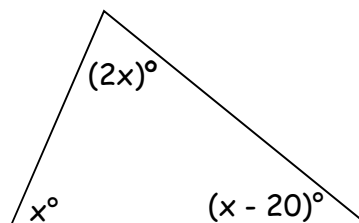
9.



10.



11.



12. Find  $m\angle 1$ ,  $m\angle 2$ ,  $m\angle 3$ ,  $m\angle 4$ , and  $m\angle 5$ .

