Lesson Summary

The sum of the measures of the remote interior angles of a triangle is equal to the measure of the related exterior angle. For example, $\angle CAB + \angle ABC = \angle ACE$.

Problem Set

For each of the problems below, use the diagram to find the missing angle measure. Show your work.

1. Find the measure of angle $x$. Present an informal argument showing that your answer is correct.
2. Find the measure of angle $x$.

![Diagram of a triangle with angles $52^\circ$, $44^\circ$, and $x$.]

3. Find the measure of angle $x$. Present an informal argument showing that your answer is correct.

![Diagram of a triangle with angles $25^\circ$, $76^\circ$, and $x$.]

4. Find the measure of angle $x$.

![Diagram of a triangle with angles $52^\circ$, $27^\circ$, and $x$.]
5. Find the measure of angle $x$.

6. Find the measure of angle $x$.

7. Find the measure of angle $x$. 
8. Find the measure of angle $x$.

9. Find the measure of angle $x$.

10. Write an equation that would allow you to find the measure of angle $x$. Present an informal argument showing that your answer is correct.