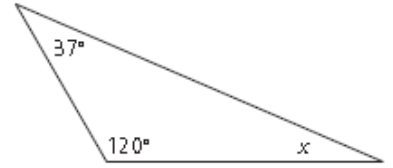
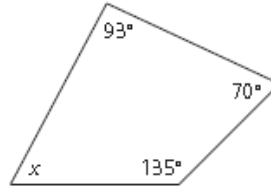
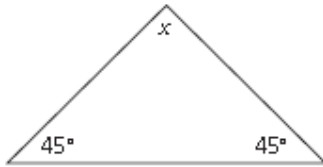
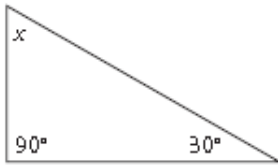
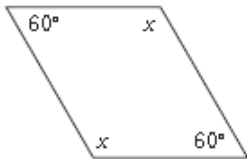


# KHM: Using Angle Sums

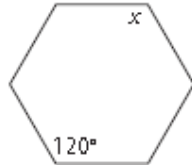
Find the measure of each angle labeled  $x$ .



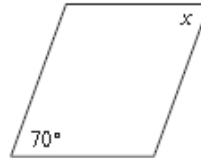
This figure is a parallelogram.



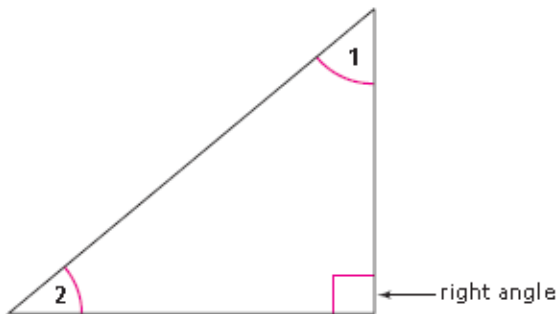
This figure is a regular hexagon.



This figure is a parallelogram.

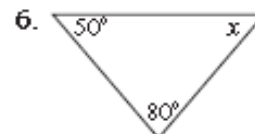
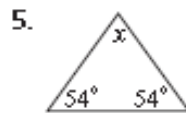
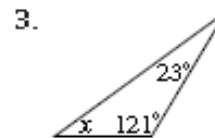
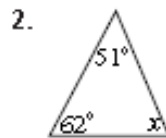
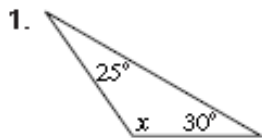


A **right triangle** has one right angle and two acute angles. Without measuring, find the sum of the measures of the two acute angles. Explain.

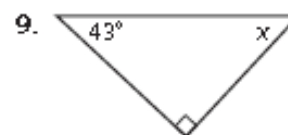
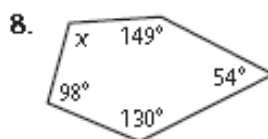
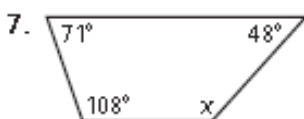


Section 1

Find the measure of each angle labeled  $x$ .



Find the measure of each angle labeled  $x$ .



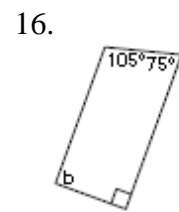
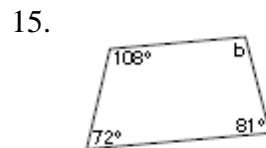
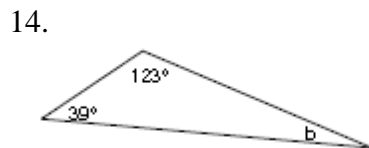
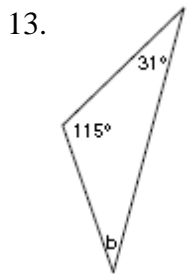
Section 2

10. An isosceles triangle has two  $50^\circ$  angles. What is the measure of the third angle? Explain your reasoning.

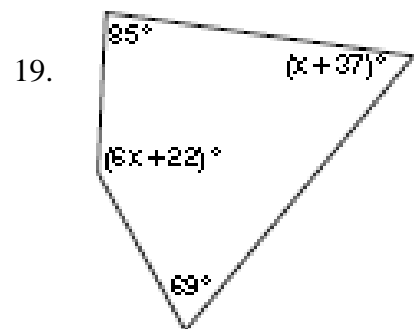
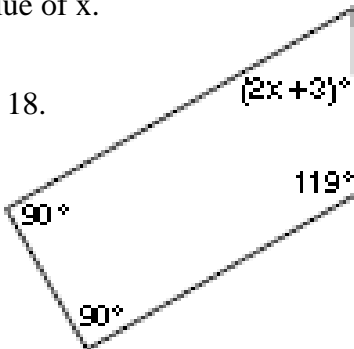
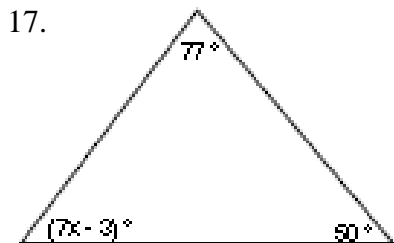
11. One angle of an isosceles triangle measures  $100^\circ$ . What are the measures of the other two angles? Explain your reasoning.

12. Two of the measures of a parallelogram are  $75^\circ$ . What are the measures of the other two angles? Explain your reasoning.

In Exercises 13 – 16, find the measure of angle b.



In Exercises 17 – 19, find the value of x.



20. In a regular octagon, if 7 of the interior angles each measure 135 degrees, what is the measure of the remaining angle?