

## Lesson 12 ~ Angle Sum of a Quadrilateral

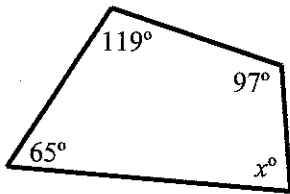
Name \_\_\_\_\_

Period \_\_\_\_\_

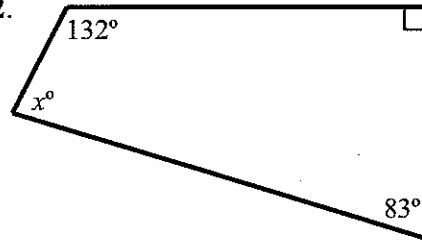
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Set up an equation and solve for  $x$ .

1.



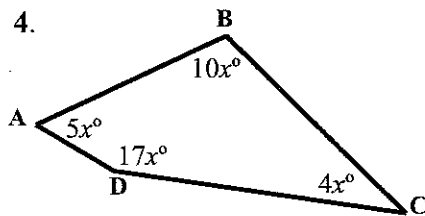
2.



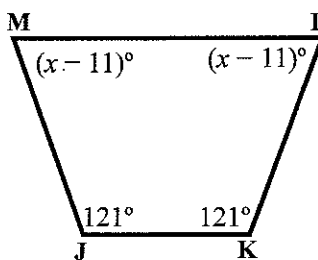
3. A quadrilateral has angles that measure  $54^\circ$ ,  $117^\circ$  and  $61^\circ$ . What is the measure of the missing angle?

Set up an equation and solve for  $x$ . Find the degree measures of each unknown angle.

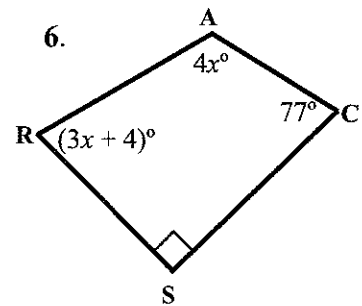
4.



5.



6.



7. Each angle in quadrilateral ABCD is  $(2x + 5)^\circ$ ,  $(4x - 11)^\circ$ ,  $(x + 24)^\circ$  and  $2x^\circ$ , respectively.

a. Draw a diagram and label it.

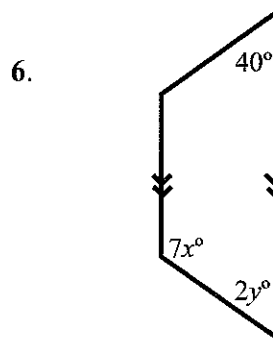
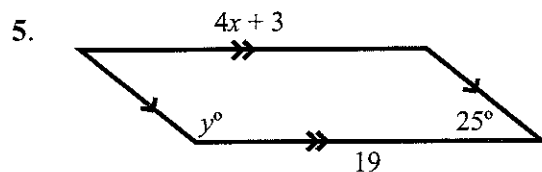
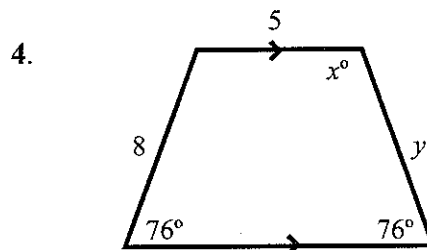
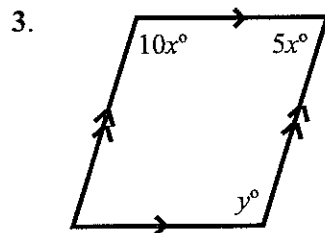
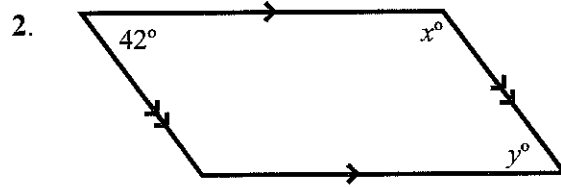
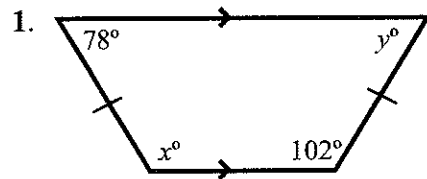
b. Set up an equation and solve for  $x$ .

c. Find the degree measure of each angle.

# Lesson 13 ~ Special Quadrilaterals

Name \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_

Find the values of  $x$  and  $y$  in each figure.



7. Draw an isosceles trapezoid. Write angle measures in the figure so that base angles are equal and pairs of top and bottom base angles are supplementary.

8. Find the values of  $a$ ,  $b$ ,  $c$  and  $d$  in the figure at the right.

