Name _____ **Date** _____

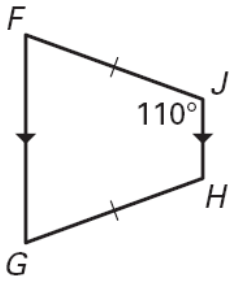
LESSON 8.5

Practice B

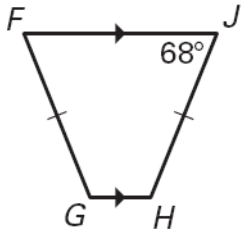
For use with pages 541–549

Find $m\angle F$, $m\angle G$, and $m\angle H$.

1.

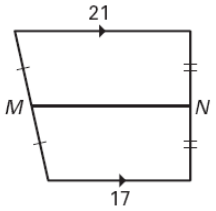


2.

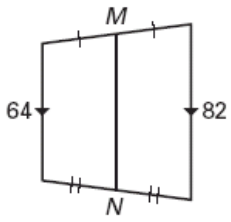


Find the length of the midsegment of the trapezoid.

3.

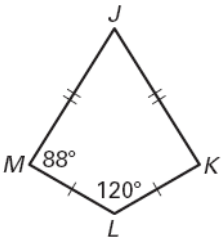


4.

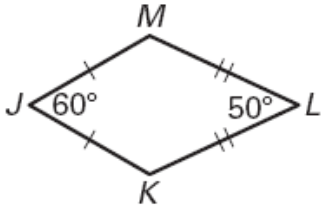


***JKLM* is a kite. Find $m\angle K$.**

5.

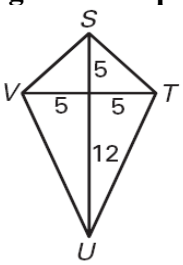


6.

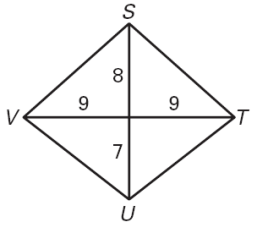


Use Theorem 8.18 and the Pythagorean Theorem to find the side lengths of the kite. Write the lengths in simplest radical form.

7.

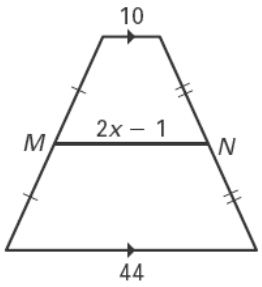


8.

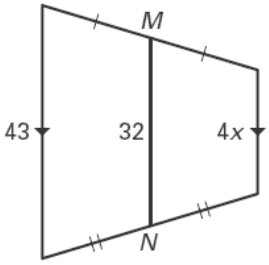


Find the value of *x*.

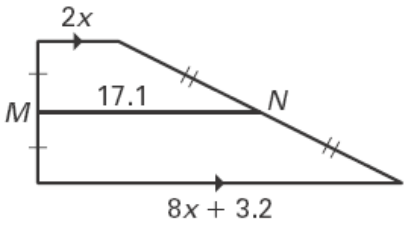
9.



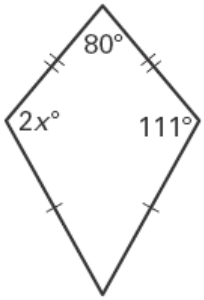
10.



11.



12.



13. Kite You cut out a piece of fabric in the shape of a kite so that the congruent angles of the kite are 100°. Of the remaining two angles, one is 4 times larger than the other. What is the measure of the largest angle in the kite?

14. Proof $\overline{MN}$ is the midsegment of isosceles trapezoid *FGHJ.* Write a paragraph proof to show that *FMNJ is* an isosceles trapezoid.