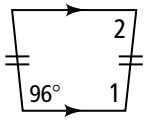
Trapezoids and Kites

5.6

Find the measures of the numbered angles in each isosceles trapezoid.

1.



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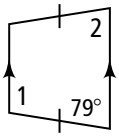

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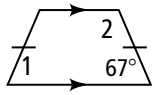

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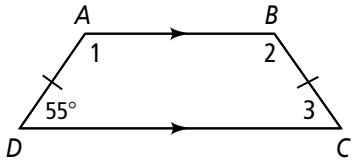

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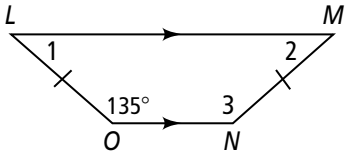

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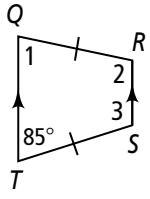

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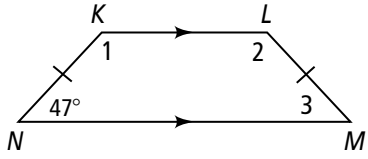
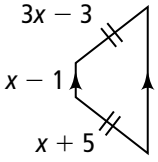


Algebra Find the value(s) of the variable(s) in each isosceles trapezoid.

8.



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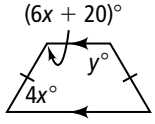

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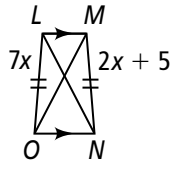
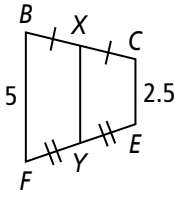


Find *XY* in each trapezoid.

11.



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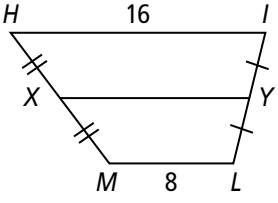

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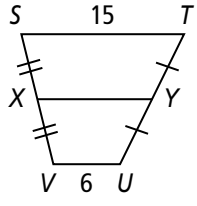
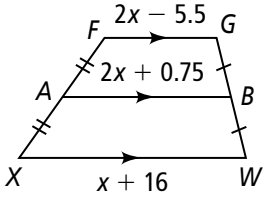


Algebra Find the lengths of the segments with variable expressions.

14.



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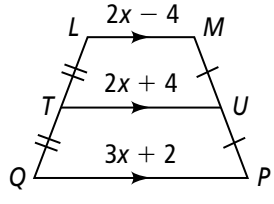

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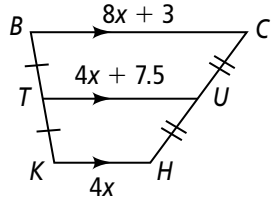

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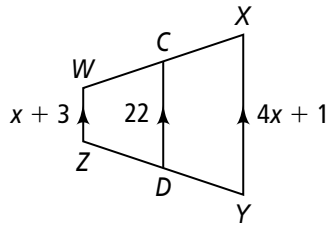
17. $\overline{CD}$ is the midsegment of trapezoid $WXYZ$.



a. What is the value of x?

b. What is XY?

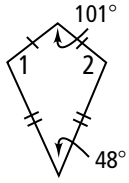
c. What is WZ?

18. Reasoning The diagonals of a quadrilateral form two acute and two obtuse angles at their intersection. Is this quadrilateral a kite? Explain.

19. Reasoning The diagonals of a quadrilateral form right angles and its side lengths are 4, 4, 6, and 6. Could this quadrilateral be a kite? Explain.

Find the measures of the numbered angles in each kite.

20.



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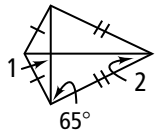

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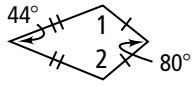

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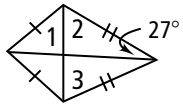

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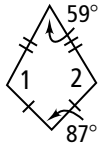

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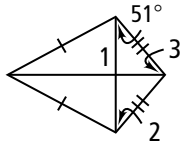
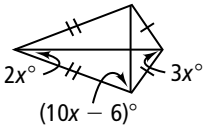


Algebra Find the value(s) of the variable(s) in each kite.

26.



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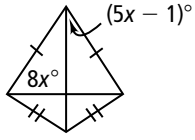

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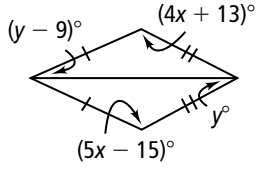
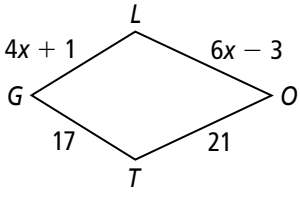


For which value of x is each figure a kite?

29.



30.