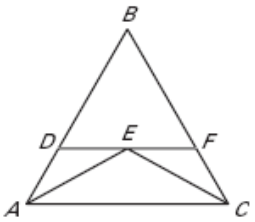
Name _____ **Date** _____

Assignment 36 LESSON 4.8

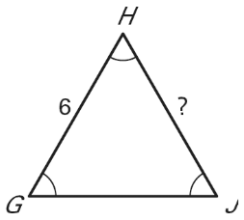
In Exercises 1-4, use the diagram. Copy and complete the statement. Tell what theorem or corollary you used.



1. If $\overline{AE} \cong \overline{CE}$, then? $\measuredangle$ __?__ $\cong \measuredangle$ __?__.
2. If $\measuredangle DAE \cong \measuredangle DEA$, then __?__ $\cong$ __?__.
3. If $\measuredangle BDF \cong \measuredangle DBF \cong \measuredangle BFD$, then __?__ $\cong$ __?__ $\cong$ __?__.
4. If $\overline{AB} \cong \overline{BC} \cong \overline{AC}$, then $\measuredangle$ __?__ $\cong \measuredangle$ __?__ $\cong \measuredangle$ __?__.

Find the unknown measure.

5.



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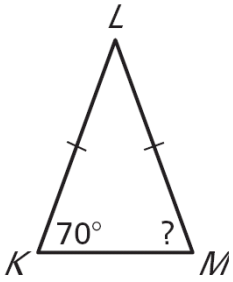

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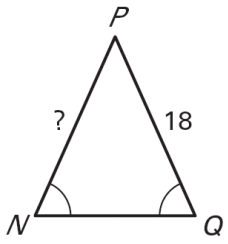
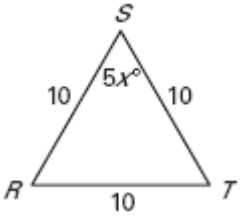


Find the value of *x*.

8.



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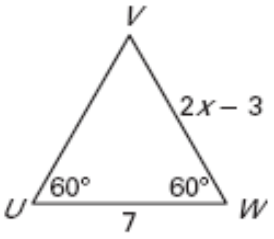

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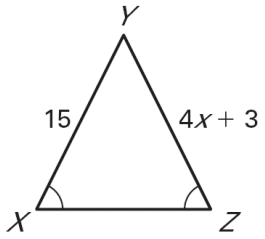

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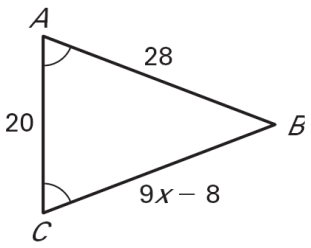

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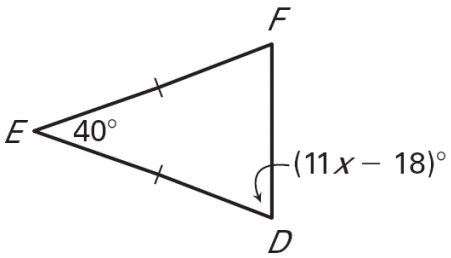

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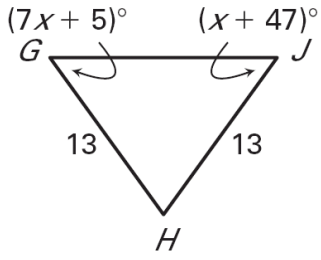
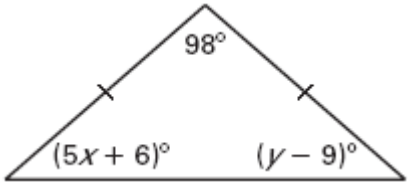


Find the values of *x* and *y*.

14.



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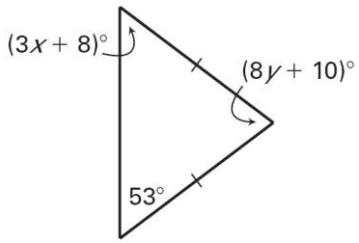

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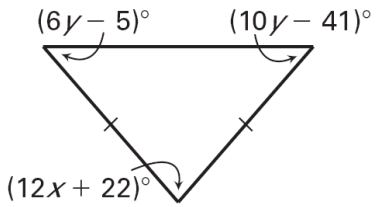
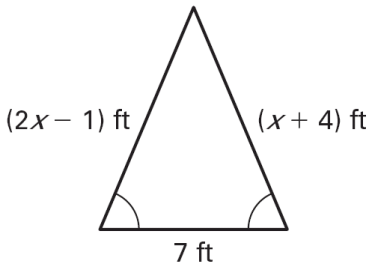


Find the perimeter of the triangle.

17.



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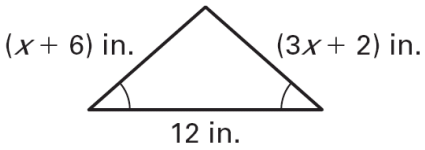

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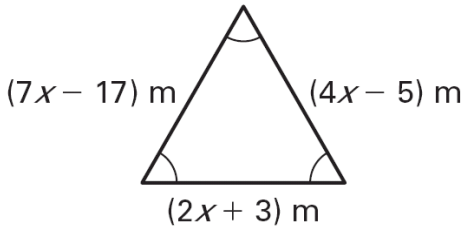

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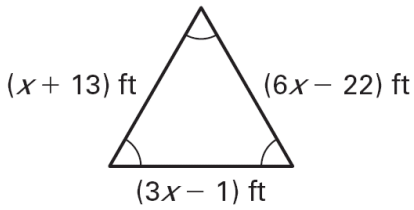

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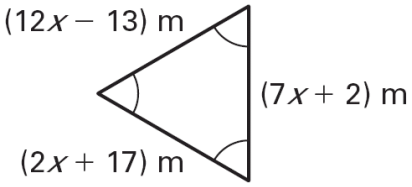

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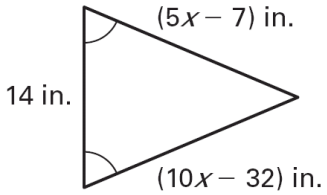

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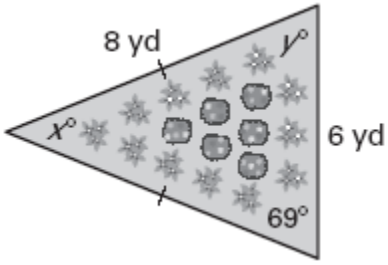

Garden You plant a garden in the shape of a triangle as shown in the figure. What is the perimeter of the garden? Find the values of x and y.