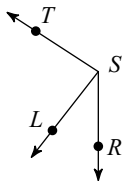
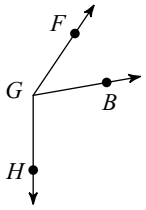
SM2-A HW #9-1A (Unit 8 Weak Areas)

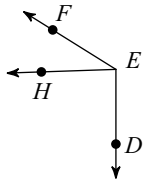
1) Find x if $m\angle LST = 85°$, $m\angle RST = 62x - 1$, and $m\angle RSL = 19x$.



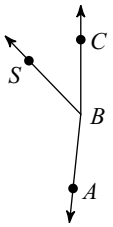
2) Find x if $m\angle FGB = 3x + 13$, $m\angle FGH = 12x + 14$, and $m\angle BGH = 100°$.



3) $m\angle DEF = 122°$ and $m\angle DEH = 88°$. Find $m\angle HEF$.

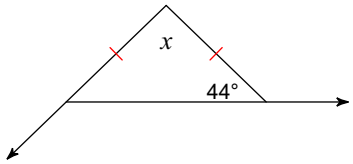


4) $m\angle ABC = 174°$ and $m\angle ABS = 130°$. Find $m\angle SBC$.



Find the value of x.

5)



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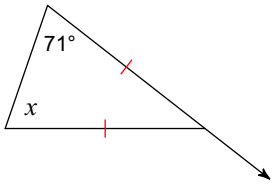

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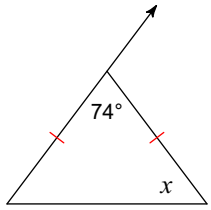

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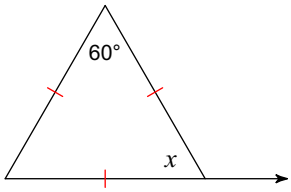

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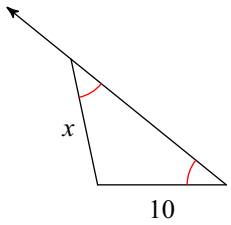

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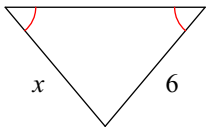

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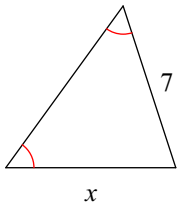

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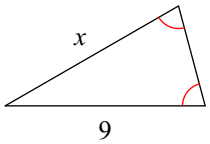
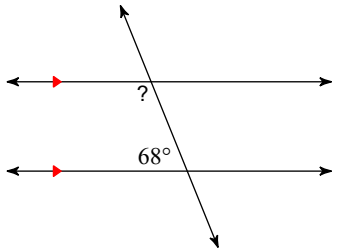


Find the measure of each angle indicated.

13)



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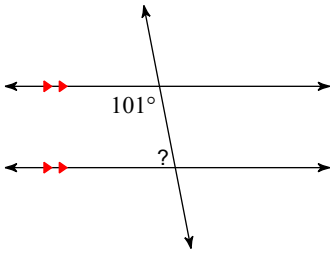
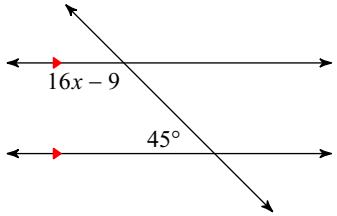
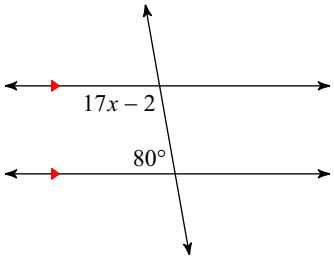


Solve for *x*.

15)

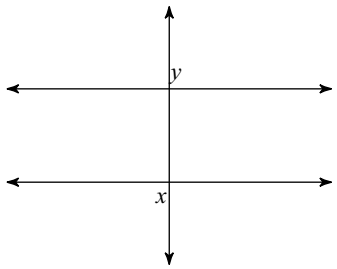


16)

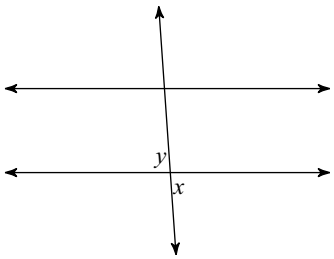


Identify each pair of angles as corresponding, alternate interior, alternate exterior, consecutive interior, vertical, or adjacent.

17)



18)



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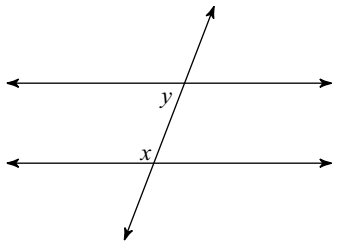

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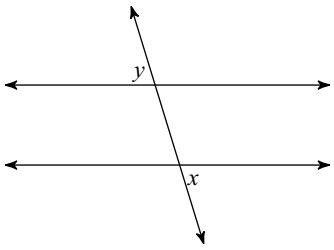

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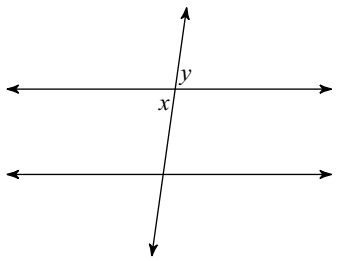

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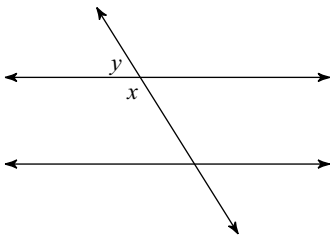

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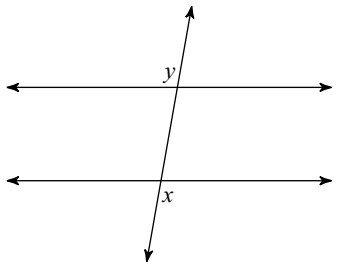

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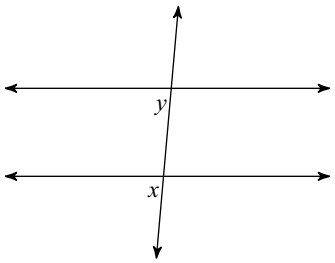

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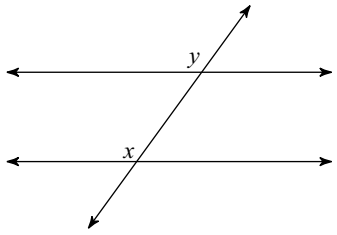

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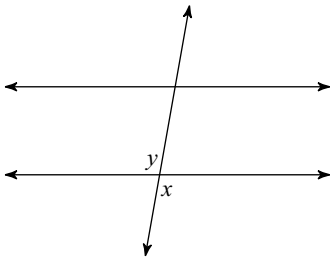
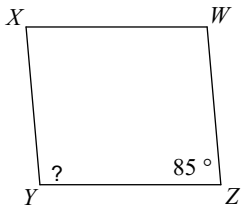


Find the measurement indicated in each parallelogram.

27)



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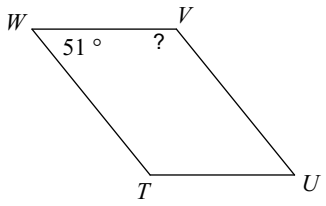
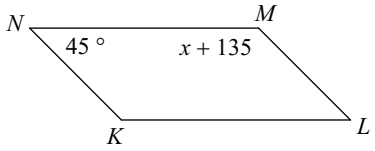


Solve for *x*. Each figure is a parallelogram.

29)



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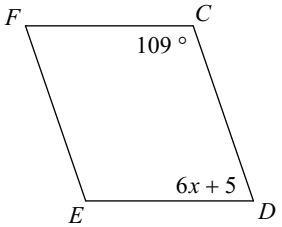
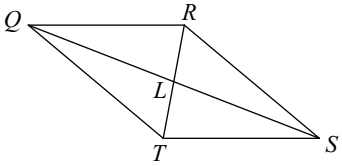
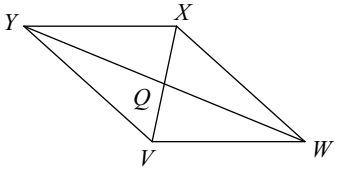


31) $LT = 22$
$RT = 4x + 8$

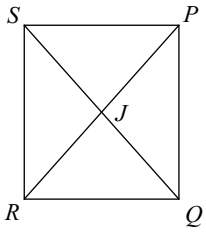


32) $XQ = 8$
$QV = 2x - 16$

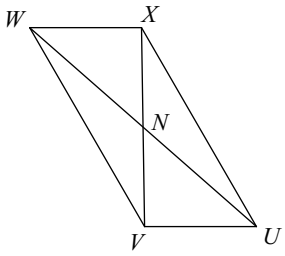


Find the measurement indicated in each parallelogram.

33) $QS = 38$
Find JS

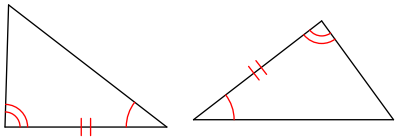


34) $VX = 13$
Find NX

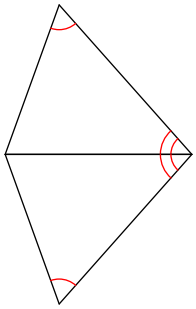


Determine if the two triangles are congruent. If they are, state how you know.

35)



36)



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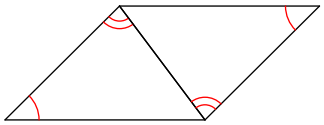

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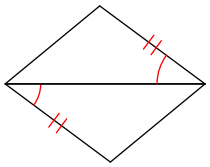

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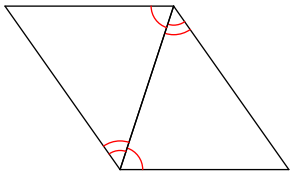

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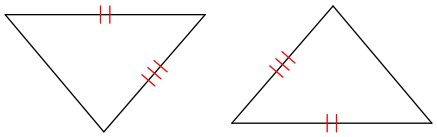

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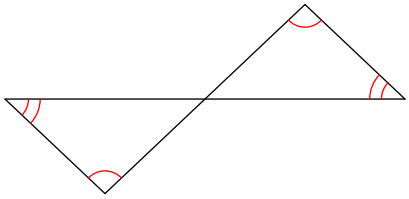

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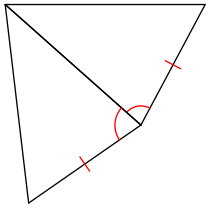


Find the midpoint of the line segment with the given endpoints.

43) $(-1, 8), (1, -1)$

44) $(8, -7), (-1, 5)$

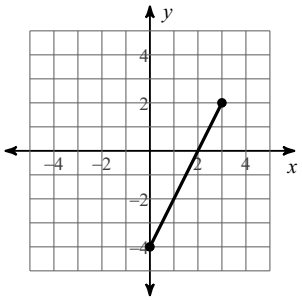
Find the other endpoint of the line segment with the given endpoint and midpoint.

45) Endpoint: $(-4, -7)$, midpoint: $(8, -4)$

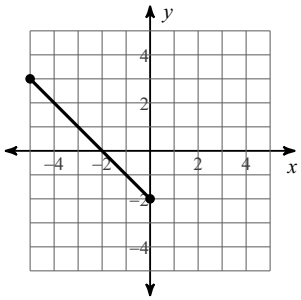
46) Endpoint: $(10, -2)$, midpoint: $(-10, -3)$

Find the distance between each pair of points.

47)



48)



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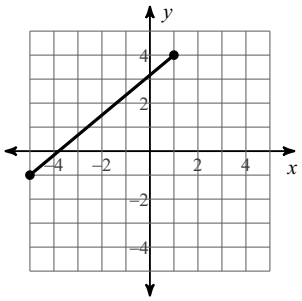

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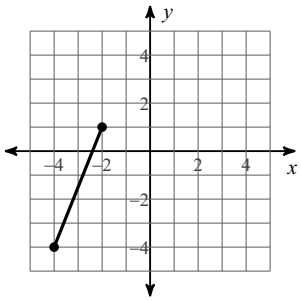
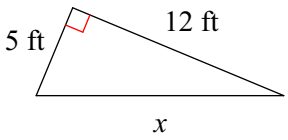


Find the missing side of each triangle. Round your answers to the nearest tenth if necessary.

51)



Find the missing side of each triangle. Leave your answers in simplest radical form.

52)