Review Worksheet for Lessons 5-1, 5-2 and 5-4

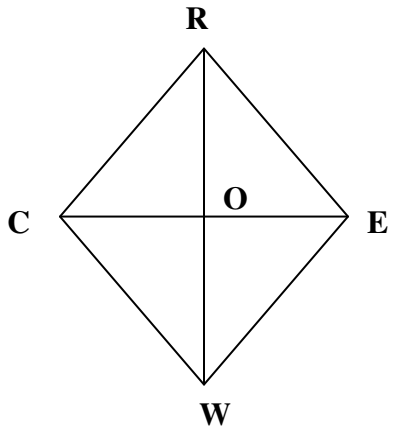
For problems 1-4 refer to parallelogram CREW.

1) If OE = 4 and WE = 8, name two segments congruent to segment WE

2) If $\overline{WR} \perp \overline{CE}$, name all the angles congruent to < RCE

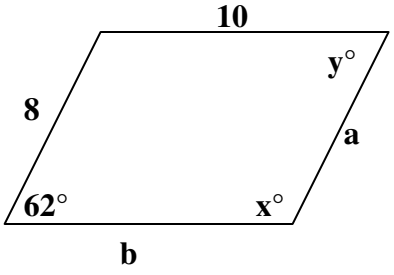
3) If $\overline{WR} \perp \overline{CE}$, name all the segments congruent to segment WE

4) If RE = EW, name all angles congruent to < ERW



For the given parallelograms, find the value of a, b, x, and y.

5)



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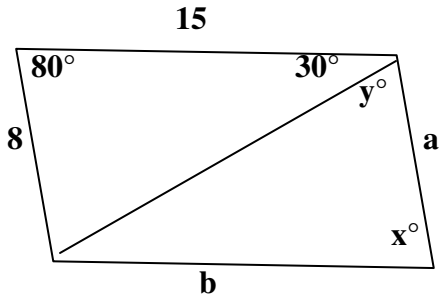

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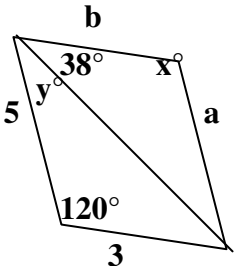

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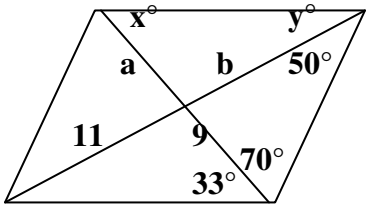

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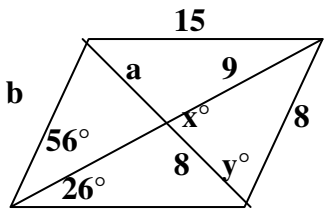

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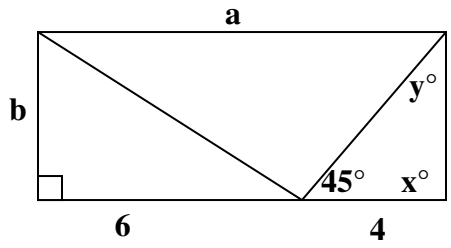
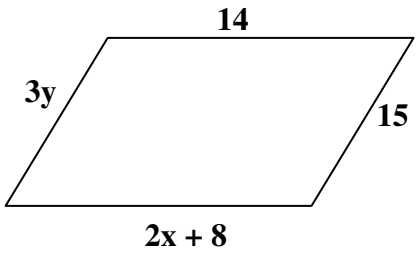


For each of the following parallelograms, find the values of x and y.

11)



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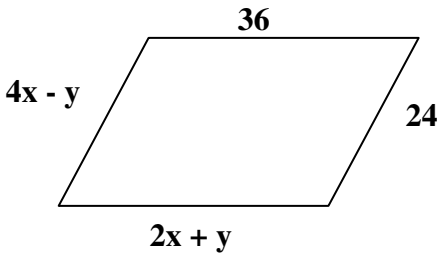
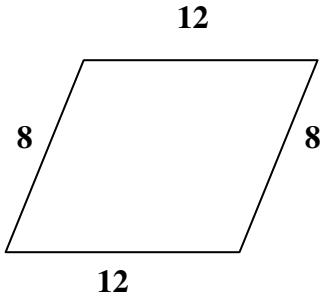


Decide if each figure must be a parallelogram and list the theorem that helped you decide. If it is not a parallelogram just write *no*.

13)



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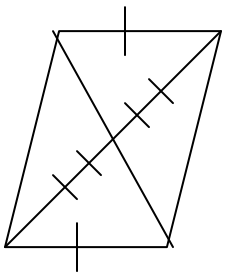

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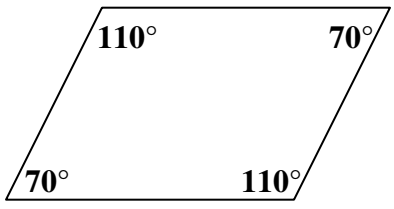
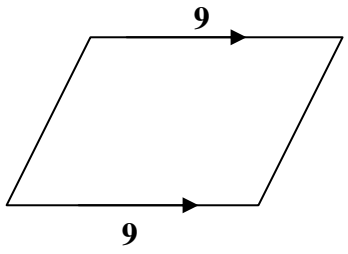
16)





Given that quadrilateral WXYZ is a rectangle, find the following measures.

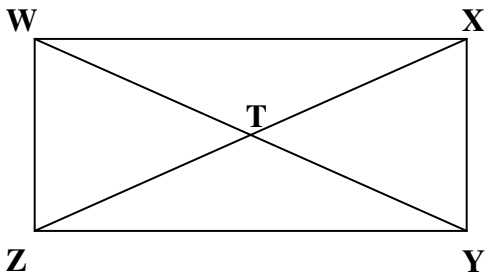
17) If WY = 19, then ZX = _____

18) If WY = 19, then WT = _____

19) If TX = 4.5, then WY = _____

20) If WY = 3a + 16 and ZX = 5a – 18, then a = _____

21) If m< TWZ = 70°, then m< TZW = _____ and m< WTZ = _____



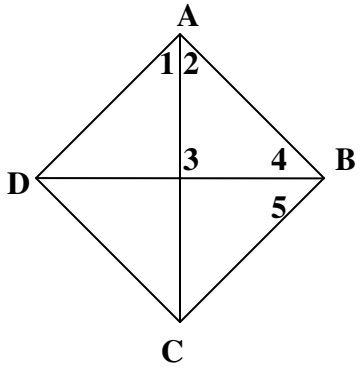
Given that quadrilateral ABCD is a rhombus, find the following measures.

22) If AD = 13, then AB = _____

23) If m< 4 = 25°, then m< 5 = _____

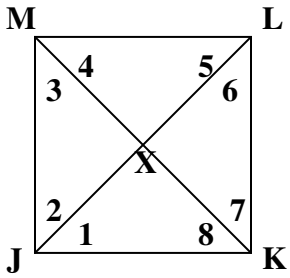
24) If m< DAB = 130°, then m< ADC = _____

25) If m< 4 = 3x - 2 and m< 5 = 3x – 8 then x = _____



26) If m< 1 = 5x + 18 and m< 5 = 3x – 8, then x = _____ 27) If m< 2 = 3y + 9 and m< 4 = 2y – 4 then y = _____	

Given that quadrilateral JKLM is a square, find the following measures.

28) If MJ = 12, then ML = _____ and LK = _____ 29) If MX = 8, then XJ = _____ 30) If JL = 18, then MK = _____ 31) m< MJK = _____ and m< MXJ = _____ 32) The numbered angles each have a measure of _____°	

Answer Key:

1) $\overline{RC}$ and $\overline{CE}$ 2) < REC, < WCE, and < WEC 3) $\overline{ER}$, $\overline{RC}$, and $\overline{CW}$
4) < CRW, < CWR, and < EWR 5) a = 8 b = 10 x = 118° y = 62°
6) a = 8 b = 15 x = 80° y = 70° 7) a = 5 b = 3 x = 120° y = 22°
8) a = 9 b = 11 x = 33° y = 27° 9) a = 8 b = 8 x = 56° y = 68°
10) a = 10 b = 4 x = 90° y = 45° 11) x = 3 y = 5
12) x = 10 y = 16 13) Theorem 5-4 14) no
15) Theorem 5-5 16) Theorem 5-6 17) ZX = 19
18) WT = 9.5 19) WY = 9 20) a = 17
21) m< TZW = 70° m< WTZ = 40° 22) AB = 13 23) m< 5 = 25°
24) m< ADC = 50° 25) x = 9 26) x = 10 27) y = 17
28) ML = 12 LK = 12 29) XJ = 8 30) MK = 18

31) m< MJK = 90° and m< MXJ = 90°

32) 45°