

Name _____

Date _____

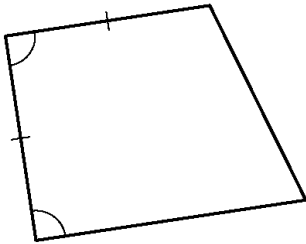
LESSON 8.5

Practice C

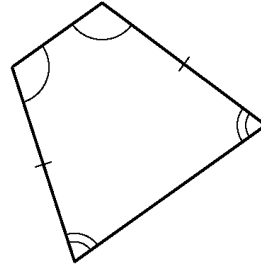
For use with pages 541–549

Determine whether the quadrilateral is a trapezoid. If it is, is it an isosceles trapezoid?

1.

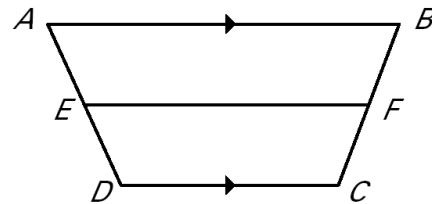


2.



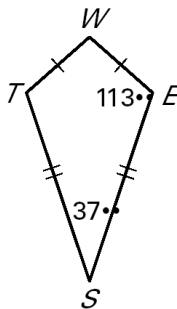
Quadrilateral $ABCD$ is a trapezoid with midsegment \overline{EF} . Use the given information to answer the following.

3. If $m\angle B = 73^\circ$, then $m\angle C = \underline{\hspace{2cm}}$.
4. If $m\angle A = 51^\circ$ and $m\angle C = 105^\circ$, then $m\angle D = \underline{\hspace{2cm}}$.
5. If $m\angle A = 48^\circ$ and $m\angle C = 112^\circ$, then $m\angle CFE = \underline{\hspace{2cm}}$.
6. If $AB = 28$ and $DC = 13$, then $EF = \underline{\hspace{2cm}}$.
7. If $EF = 13$ and $DC = 6$, then $AB = \underline{\hspace{2cm}}$.
8. If $EF = x + 5$ and $DC + AB = 4x + 6$, then $EF = \underline{\hspace{2cm}}$.

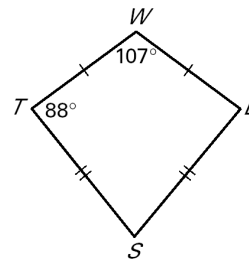


$WEST$ is a kite. Find the measures of the missing angles.

9.

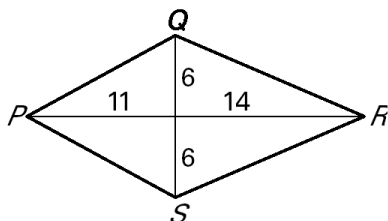


10.

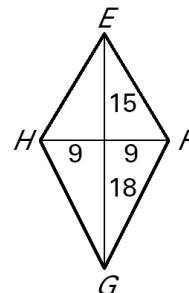


Use Theorem 8.18 and the Pythagorean Theorem to find the side lengths of the kite. Write the lengths in simplest radical form.

11.

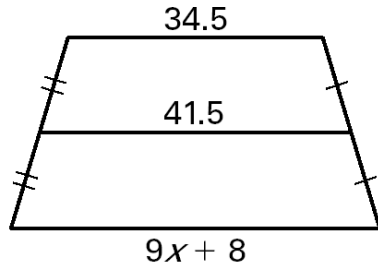


12.

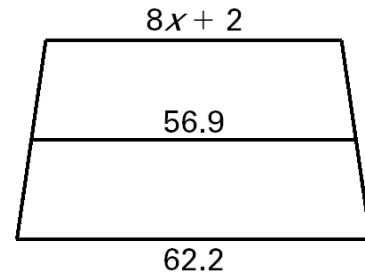


Find the value of x .

13.



14.



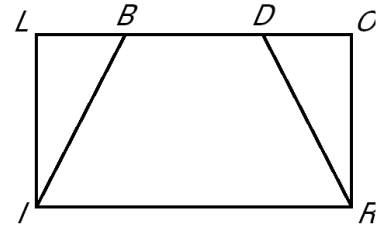
15. In an isosceles trapezoid, if one pair of base angles is twice the measure of the second pair of base angles, what are the measures of the angles?

16. If the midsegment of a trapezoid measures 6 units long, what is true about the lengths of the bases of the trapezoid?

17. **GIVEN:** $LORI$ is a rectangle.

$$\overline{LB} \cong \overline{DO}$$

PROVE: $BIRD$ is an isosceles trapezoid.



Statements	Reasons
1. $LORI$ is a rectangle.	1. _____
2. $\angle ILB$ and $\angle ROB$ are right angles	2. _____
3. _____	3. Right Angle Congruence Thm.
4. $\overline{LI} \cong \overline{OR}$	4. _____
5. _____	5. Given
6. $\triangle LBI \cong \triangle ODR$	6. _____
7. _____	7. CPCTC
8. _____	8. Definition of a parallelogram
9. $BIRD$ is an isosceles trapezoid.	9. _____