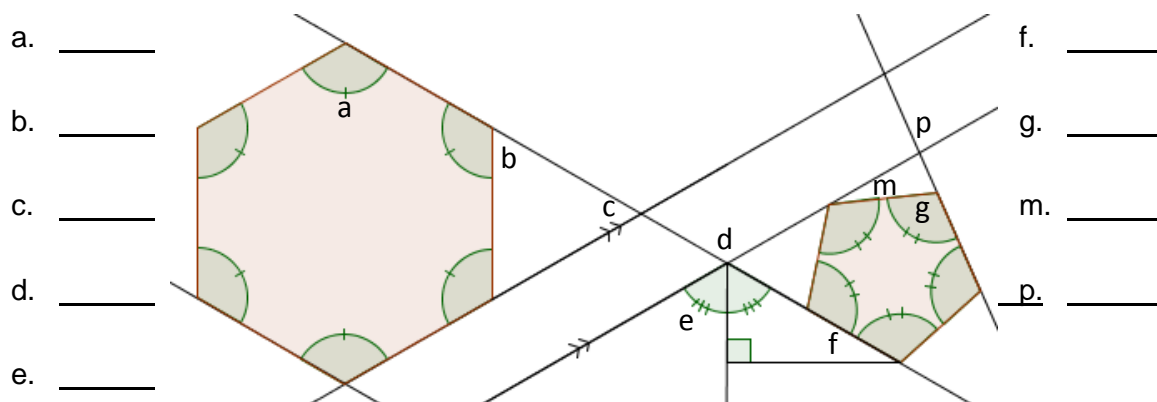


NAME: _____ PERIOD: _____ DATE: _____

Indicate whether each statement is (T) rue or (F) alse.

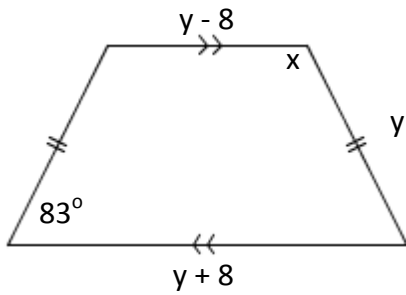
1. _____ A pair of base angles of an isosceles trapezoid are supplementary.
2. _____ If a quadrilateral has two congruent angles then it must have two congruent sides.
3. _____ The diagonals of a parallelogram are congruent.
4. _____ The diagonals of a rhombus bisect the angles of the rhombus.
5. _____ The sum of the measures of the five interior angles of a pentagon is 540° .
6. _____ If the vertex angles of a kite measure 48° and 36° , then the nonvertex angles each measure 138° .
7. _____ The sum of the measures of any two consecutive angles of a trapezoid is greater than the sum of the measures of any pair of base angles.
8. _____ If a quadrilateral has three congruent angles, then the quadrilateral is a rectangle.
9. _____ Every square is a rhombus.
10. _____ The line through the points $(2,-4)$ and $(4,-2)$ is perpendicular to the line $y = -x + 4$

Find the measure of each lettered angle in the figure.

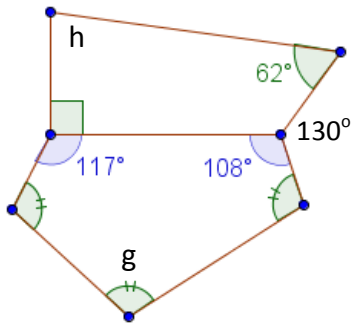


Solve for the indicated values.

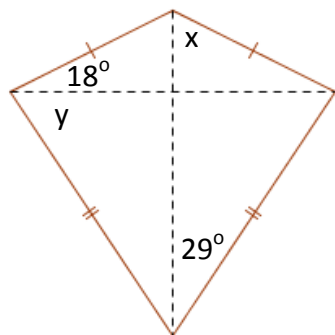
12. $x =$ _____ $y =$ _____ Perimeter = 256 cm



13. $g =$ _____ $h =$ _____



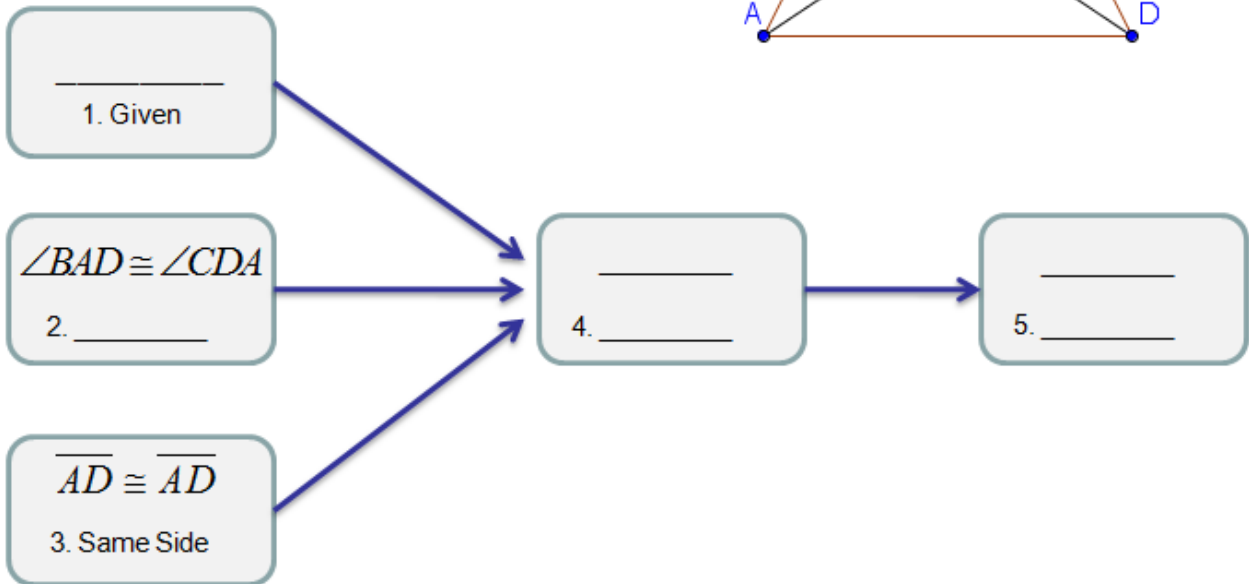
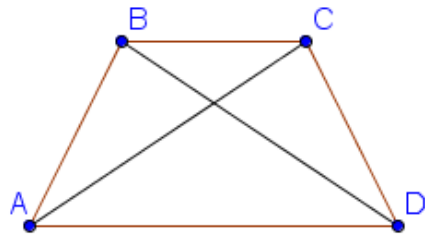
14. $x =$ _____ $y =$ _____



Complete the Flowchart Proof below.

15. **Given:** Isosceles trapezoid with $\overline{AB} \cong \overline{DC}$

Show $\overline{AC} \cong \overline{DB}$



Develop a Flowchart Proof for the following conjecture.

16. **Conjecture:** The non-vertex angles of a kite are congruent.

Solve the following (CIRCLE YOUR ANSWER)

17. Write the equation of the line that includes the points (2,3) and (6,8).
18. Write the equation of line that is a perpendicular to the line $3x + 2y = 5$ and passes through the point (9,10).
19. Find the point of intersection of the lines $2x + 5y = 10$ and $-4x + 7y = -3$.

Perform the indicated operations and write the answer in Standard Form.

20. $(4x^2 - 6x - 3) + (-2x^2 + 4x + 5)$ _____

21. $(-2x^3 + 7x^2 - 7x + 2) \div (2x - 1)$ _____