

1. Which property is true of all Isosceles Trapezoids?

- a. Opposite sides are parallel
- b. Parallel sides are congruent
- c. Opposite angles are congruent
- d. Base angles are congruent

2. Which property is shared by both the rectangle and the Isosceles Trapezoid?

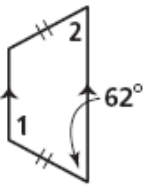
- a. Opposite sides congruent
- b. Opposite sides parallel
- c. Diagonals congruent
- d. Diagonals bisect each other

3. Which property is shared by both a parallelogram and a trapezoid?

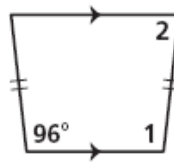
- a. Opposite sides parallel
- b. Consecutive angles sum of 180°
- c. Interior angle sum of 360° .
- d. Opposite sides are congruent.

Find the value of the numbered angles for each Isosceles Trapezoid.

4.

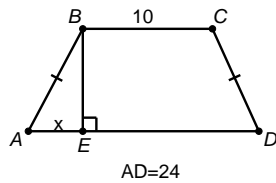


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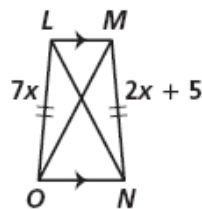


Find the value of x in each Isosceles Trapezoid.

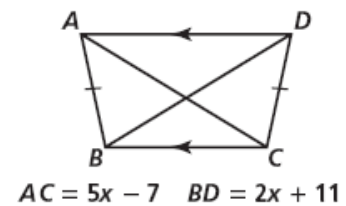
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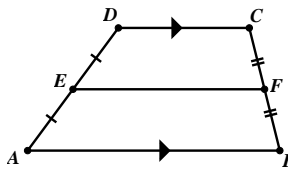
7.



8.



9-14 Use Trapezoid ABCD with Median \overline{EF} .



9. $AB = 26$
 $EF = 18$

Find DC.

10. $AB = 21$
 $DC = 4x - 11$
 $EF = 3x$

Find x.

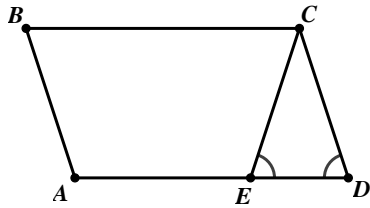
11. $m\angle CFE = 10x - 22$
 $m\angle CBA = 48$

Find x.

Proofs:

15. Given: Trapezoid ABCE ($\overline{BC} \parallel \overline{AE}$)
 Parallelogram ABCD
 $\angle CED \cong \angle CDE$

Prove: ABCE is an Isosceles Trapezoid



17. Given quadrilateral MATH with vertices $M(1,3)$, $A(-1,1)$, $T(-1,-2)$, and $H(4,3)$.
 Prove that MATH is an Isosceles Trapezoid.

