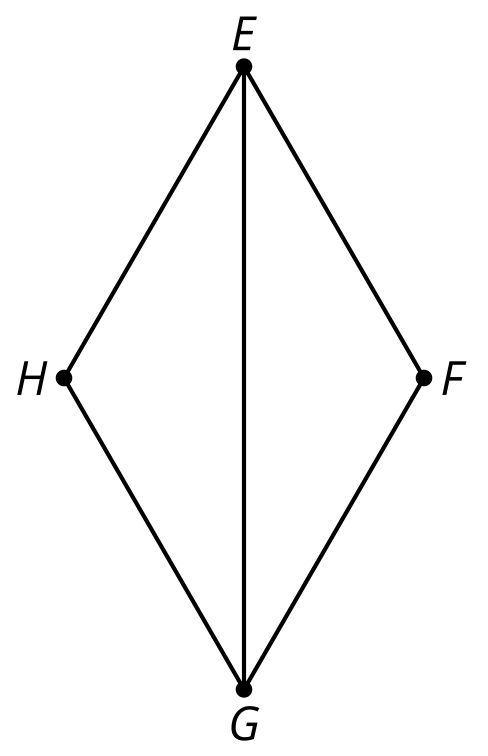
### Lesson 14 Practice Problems

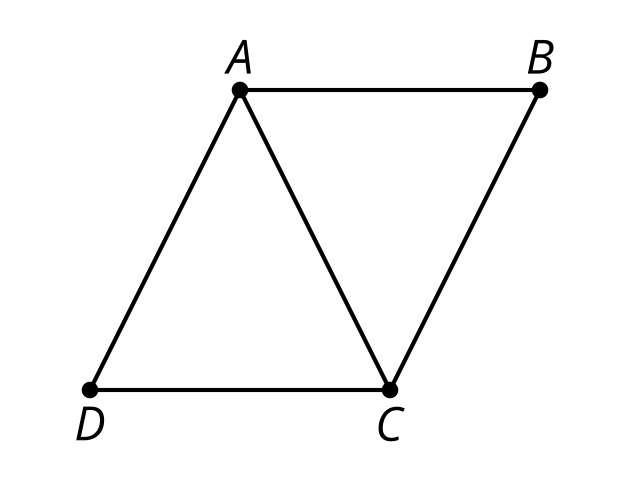
1. Select **all** quadrilaterals for which a diagonal is also a line of symmetry.
   1. trapezoid
   2. isosceles trapezoid
   3. parallelogram
   4. rhombus
   5. rectangle
   6. square
2. Show that diagonal is a line of symmetry for rhombus .

* 

1. is an isosceles trapezoid. Priya makes a claim that triangle  is congruent to triangle . Convince Priya this is not true.

* 
* (From Unit 2, Lesson 13.)

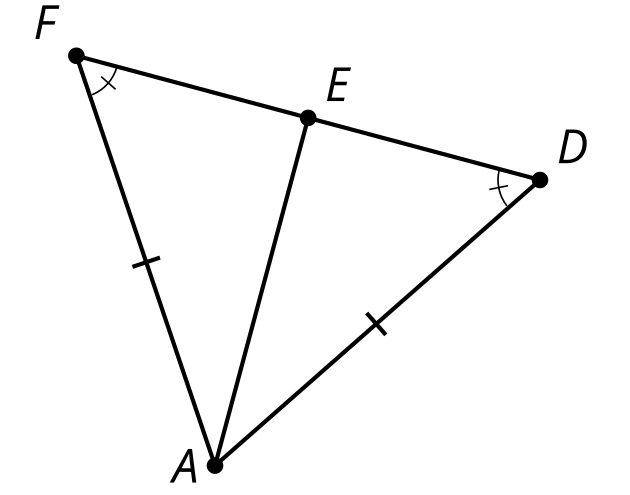
1. In quadrilateral , triangle is congruent to . Show that is a parallelogram.

* 
* (From Unit 2, Lesson 13.)

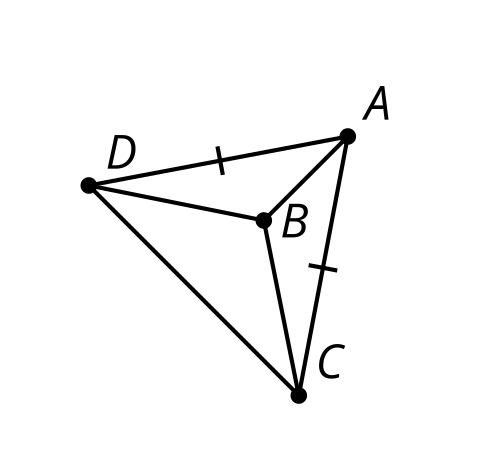
1. Priya is convinced the diagonals of the isosceles trapezoid are congruent. She knows that if she can prove triangles congruent that include the diagonals, then she will show that diagonals are also congruent. Help her complete the proof.

* is an isosceles trapezoid.
* 
* Draw auxiliary lines that are diagonals  and .   is congruent to because they are the same segment. We know angle   and  are congruent. We know  is congruent to  . Therefore, triangle  and  are congruent because of . Finally, diagonal  is congruent to  because .
* (From Unit 2, Lesson 12.)

1. Is triangle congruent to triangle ?  
   Explain your reasoning.

* 
* (From Unit 2, Lesson 11.)

1. Triangle is isosceles with congruent sides and . Which additional given information is sufficient for showing that triangle is isosceles? Select **all** that apply.

* 
  1. Segment  is congruent to segment .
  2. Segment  is congruent to segment .
  3. Angle is congruent to angle .
  4. Angle is congruent to angle .
  5. is an angle bisector of .
  6. Triangle  is congruent to triangle .
* (From Unit 2, Lesson 6.)



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