1. Answer the questions by checking the box.
   
   a. Is a square a rectangle?  
   
   Sometimes | Always
   ----|----
   | ✓ |
   
   b. Is a rectangle a kite?  
   
   Sometimes | Always
   ----|----
   ✓ | |
   
   c. Is a rectangle a parallelogram?  
   
   Sometimes | Always
   ----|----
   ✓ | |
   
   d. Is a square a trapezoid?  
   
   Sometimes | Always
   ----|----
   ✓ | |
   
   e. Is a parallelogram a trapezoid?  
   
   Sometimes | Always
   ----|----
   ✓ | |
   
   f. Is a trapezoid a parallelogram?  
   
   Sometimes | Always
   ----|----
   ✓ | |
   
   g. Is a kite a parallelogram?  
   
   Sometimes | Always
   ----|----
   ✓ | |
   
   h. For each statement that you answered with sometimes, draw and label an example that justifies your answer.
   
   This is a rectangle, but not a kite. The adjacent sides are not equal.
   
   This is a trapezoid, but not a parallelogram. There is only 1 pair of opposite parallel sides.
   
   This is a kite, but not a parallelogram. Opposite sides are not parallel.

2. Use what you know about quadrilaterals to answer each question below.
   
   a. Explain when a trapezoid is not a parallelogram. Sketch an example.
      
      Trapezoids only need 1 pair of opposite parallel sides. A parallelogram needs 2 pairs of opposite parallel sides. 
      
      Trapezoid only
      
      Parallelogram
      
   b. Explain when a kite is not a parallelogram. Sketch an example.
      
      A kite needs adjacent sides to be equal, but they don't necessarily need to have parallel sides. A parallelogram needs 2 pairs of opposite parallel sides.
      
      Kite only