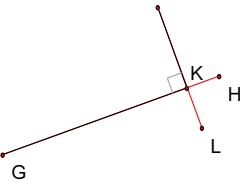
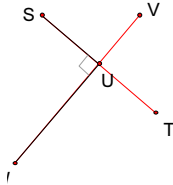
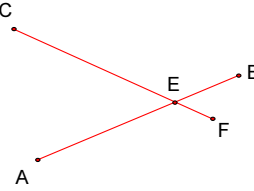
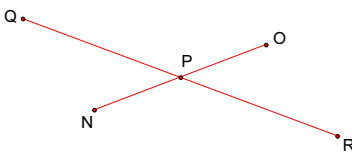


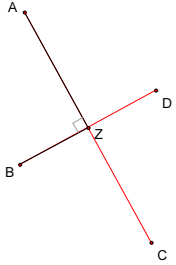
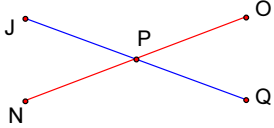
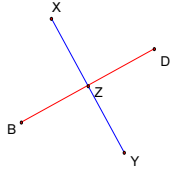
# Diagonals and Quadrilaterals

NAME \_\_\_\_\_

Think about a quadrilateral that you can sketch given the relationship between its two diagonals. Use the quadrilateral applets (your teacher will give you the URL) to explore different diagonals possible for each of the conditions below.

Use the first applet for the first four conditions, and the second applet for the next page.

CONDITIONS	DESCRIPTION OF THE TYPE(S) OF QUADRILATERAL(S) POSSIBLE	EXPLAIN YOUR REASONING
 <p>Diagonals are perpendicular</p>		
 <p>Diagonals perpendicular; one is bisected</p>		
 <p>Diagonals congruent and intersecting</p>		
 <p>Diagonals bisect each other</p>		

CONDITIONS	DESCRIPTION OF THE TYPE(S) OF QUADRILATERAL(S) POSSIBLE	EXPLAIN YOUR REASONING
 <p>Diagonals are perpendicular and bisect each other</p>		
 <p>Diagonals congruent and bisect each other</p>		
 <p>Diagonals congruent, perpendicular and bisecting each other</p>		

8. As you add more conditions to describe the diagonals, how does it change the types of quadrilaterals possible? Why does this observation make sense?