

# Diagonals and Quadrilaterals

Record which quadrilaterals are possible for each diagonal relationship, and give reasons why. Use A to indicate “All” and S to indicate “Some.”

CONGRUENT										
PERPENDICULAR	X									
NUMBER	X	1								
BISECTED	X	2								
ALL QUAD.										
KITE										
RHOMBUS										
PARALLELOGRAM										
RECTANGLE										
SQUARE										
										REASONS

CONGRUENT PERPENDICULAR NUMBER BIASECTED	ALL QUAD. KITE RHOMBUS PARALLELOGRAM RECTANGLE SQUARE	REASONS
X   2  X 2  X    X    2		

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