**First, Last Name** _____ **Core:** 1   2   3   4   **Date:**

Lesson1 Squares: Modeling Proportional Relationships

Part A: Perimeter and Side Length of Squares

1. Measure(cm) the side length of each square (G-H) on handout 1.
2. Record the side length of each square in the second column of the table below..
3. Use the formula for perimeter $p = 4s$ to complete the table.
4. Write the side lengths and perimeters as coordinate pairs. (s,p)
5. Graph the Data.

	s	p	(s, p)
G			
C			
D			
A			
I			
E			
B			
F			
H			
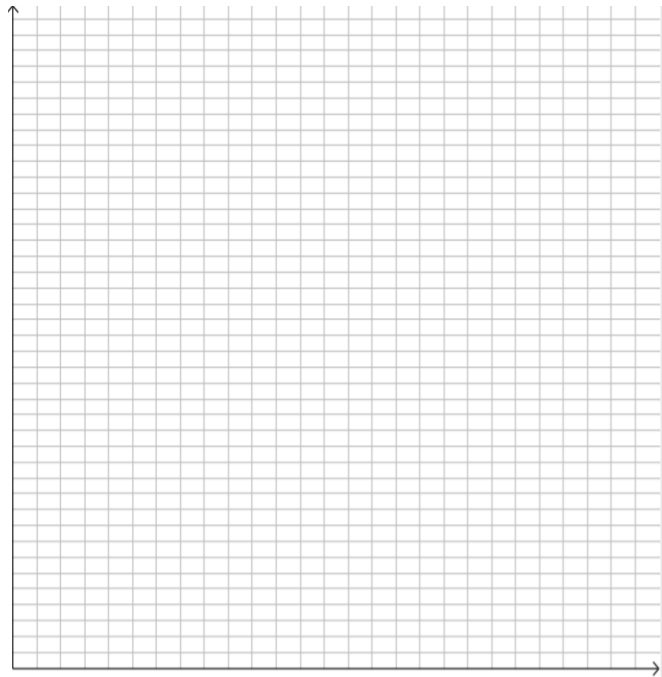
6. Is the perimeter of a square proportional to its side length? Explain.

_____

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7. If the perimeter of a square is proportional to its side length, what is the constant of proportionality? Explain.

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Part B: Area and Side Length of a Square.

1. Copy the side lengths from the first table below
2. Use the equation $a = s^2$ to complete the table.
3. Write the side lengths and areas as coordinate pairs. (s, a)
4. Graph the Data.

	s	a	(s, a)
G			
C			
D			
A			
I			
E			
B			
F			
H			
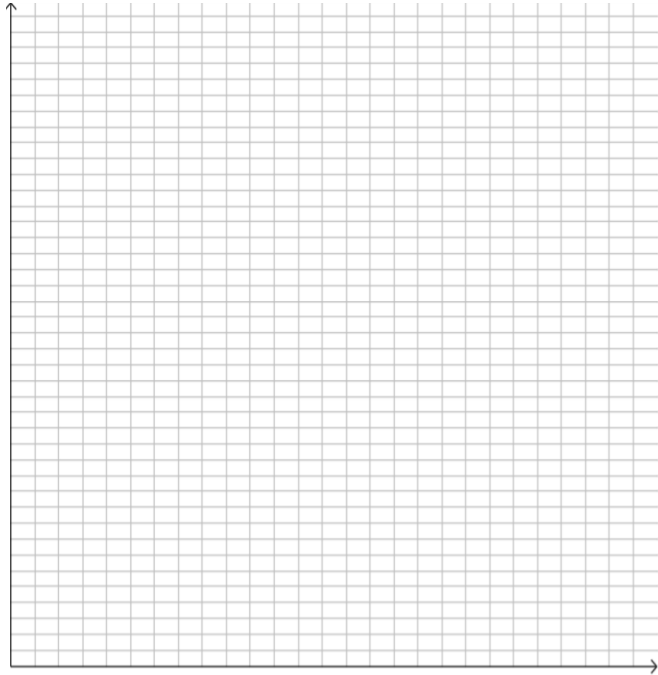
5. Is the area of a square proportional to its side length? Explain.

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6. If the area of a square is proportional to its side length, what is the constant of proportionality? Explain.

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