Name		Class	Date	
1 2	Practice			Form G
4-2	<u> </u>			

Patterns and Linear Functions

For each diagram, find the relationship between the number of shapes and the perimeter of the figure they form. Represent this relationship using a table, words, an equation, and a graph.

4 triangles

1 triangle 2 triangles 3 triangles

Triangles	1	2	3	4	5	6	\square	n
Perimeter	3	4	5				12	



1 hexagon 2 hexagons 3 hexagons

For each table, determine whether the relationship is a function. Then represent the relationship using words, an equation, and a graph.

3		
0.	x	y)
(0	1
(1	3
(2	5
(3	7

4.	x	У
	0	6
	1	7
	2	8
	3	9
1		

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ass	Date	

For each table, determine whether the relationship is a function. Then represent the relationship using words, an equation, and a graph.

5. Distance Traveled

ſ	Time (h)	Distance (mi)
\square	0	0
\square	1	55
\square	2	110
\square	3	165
T		





6. **Calories Burned**

	Minutes (min)	Calories (C)
T	0	0
Ι	10	50
Τ	20	100
	30	150
Γ)



7. Reasoning Graph the set of ordered pairs (0, 2), (1, 4), (2, 6), (3, 8). Determine whether the relationship is a linear function. Explain how you know.

8. An automaker makes a car that can travel 40 miles on its charged battery before it begins to use gas. Then the car travels 50 miles per gallon of gas used. Represent the relationship between the amount of gas used and the distance traveled using a table, an equation, and a graph.

