

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.



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

9.

x	y
0	-3
1	2
2	7
3	12


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


11. **Mountain Climbing**

Number of Hours Climbing, x	Elevation (ft), y
0	1127
1	1219
2	1311
3	1403

13. **Gas in Tank**

Miles Traveled, x	Gallons of Gas, y
0	11.2
17	10.2
34	9.2
51	8.2

-  15. **Reasoning** Graph the set of ordered pairs $(-2, -3)$, $(0, -1)$, $(1, 0)$, $(3, 2)$, and $(4, 4)$. Determine whether the relationship is a linear function. Explain how you know.

-  17. **Electric Car** An automaker makes a car that can travel 40 mi on its charged battery before it begins to use gas. Then the car travels 50 mi 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. Is total distance traveled a function of the amount of gas used? What are the independent and dependent variables? Explain.