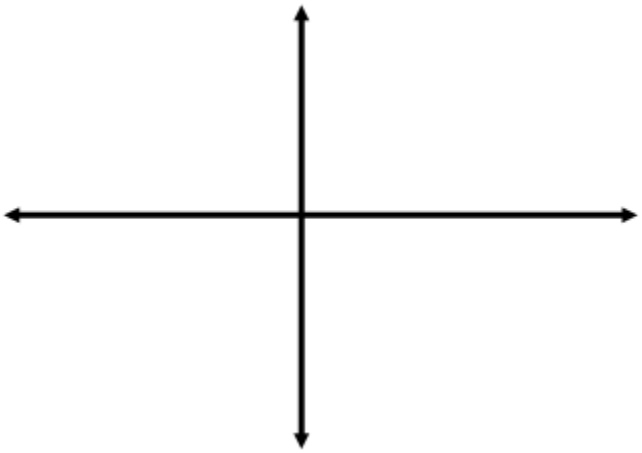
1.7: Represent Functions as Graphs

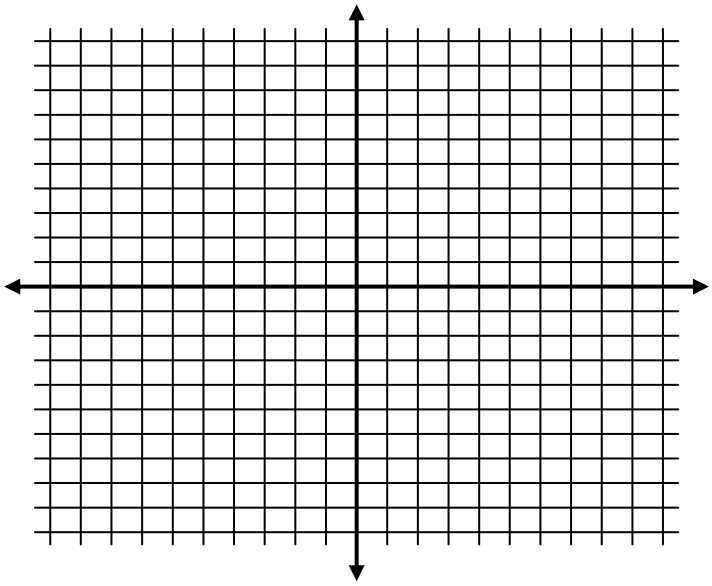
Goals: ***Graph ordered pairs (x, y)
***Graph functions so you can visualize trends
***Decide if a graph represents a function based on the "vertical line test"

RECALL

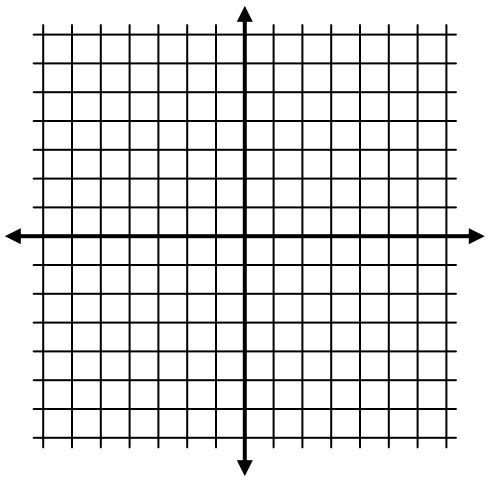
Coordinate Plane



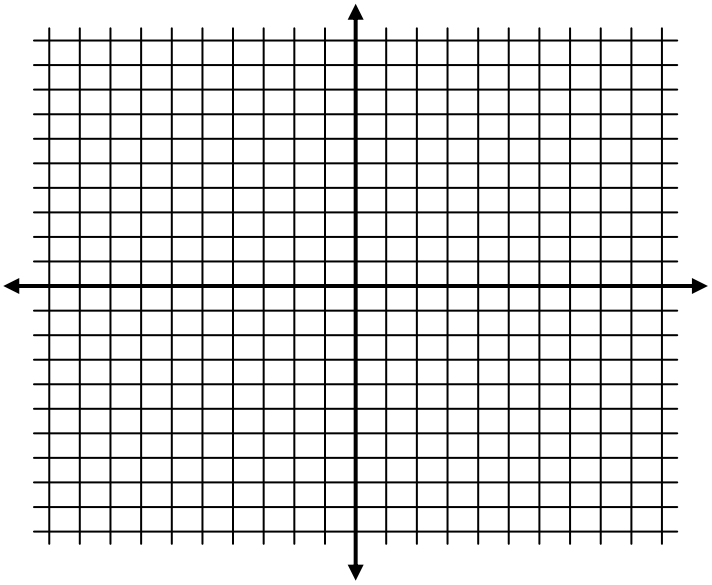
Ex: Graph the function $y = \frac{1}{2}x$ with a domain of 0, 2, 4, 6, 8



Ex: Graph the function $y = 2x - 3$ with a domain of 2, 3, 4, 5

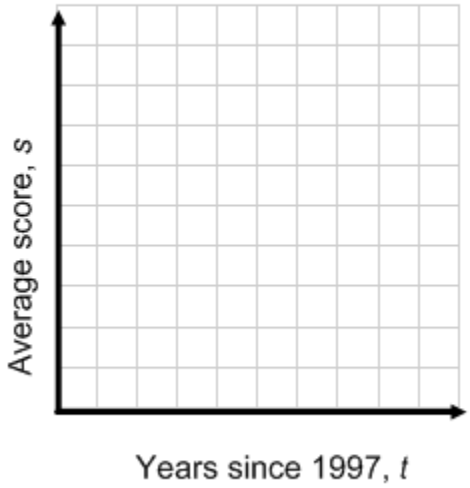


Ex: Graph the function $y = 2x - 1$ with a domain of 1, 2, 3, 4, 5



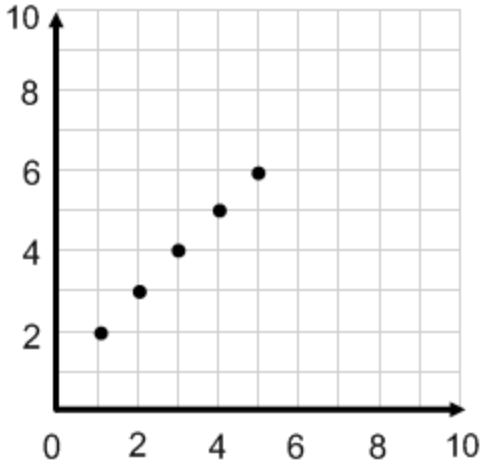
Ex: The table shows the average score, *s*, on the mathematics section of the SAT in the United States from 1997 to 2003 as a function of time, *t*, since 1997. In the table, 0 corresponds to the year 1997, 1 to 1998 and so on. Graph the function. What trend, if any, do you notice?

Years since 1997, *t*	0	1	2	3	4	5	6
Average score, *s*	511	512	511	514	514	516	519

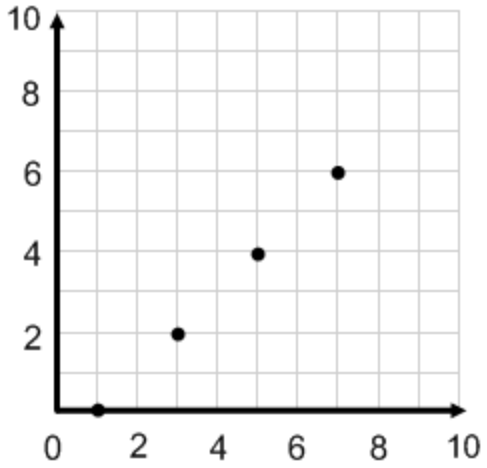


For each graph given, write a rule for the function, then identify the domain and range.

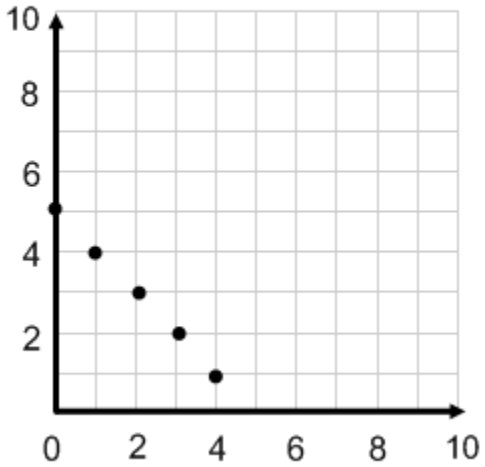
Ex:



Ex:



Ex:



Ex: