Identifying Domains and Ranges
Not Listed Explicitly as Ordered Pairs

Example Let's say you have a cell phone, the phone company charges you $10.00 per month plus $0.05 per text. Find the domain and range.

Without a lot of math, you know if you don't use the cell phone that month, you will be charged a flat rate of $10.00. If you send one text, the charge will be $10.05, 2 texts will be $10.10, 3 texts $10.15. If you sent 60 texts, you would be charged $13.00.

Thinking of this mathematically, the number of texts I could send is zero or greater; $x \geq 0$. The costs would range from $10 and up; $y \geq 10$.

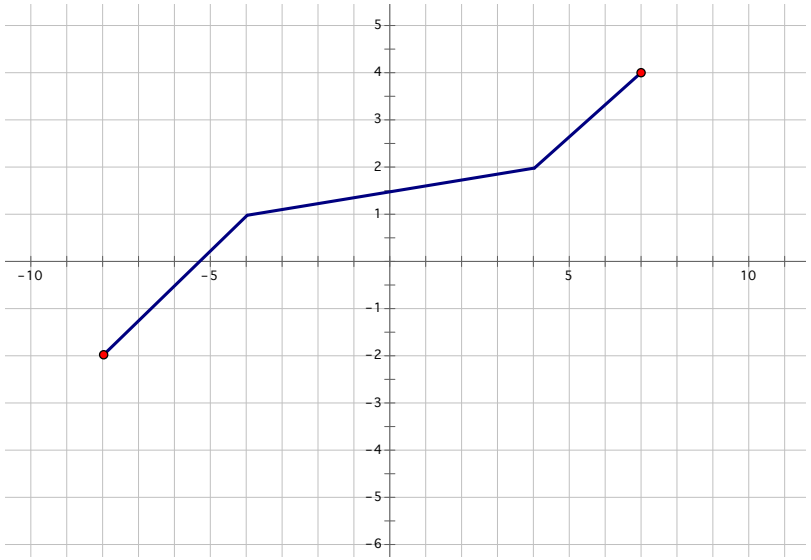
Domain = {x is an integer and $x \geq 0$}
Range = $\{y \geq 10\}$

Example Identify the domain and range in the given set of ordered pairs.
(2, 4), (5, 8), (7, 11), (9, 14)

Domain = {2, 5, 7, 9}, the first number in an ordered pair

Range = {4, 8, 11, 14}, the second number in an ordered pair

Example Find the domain and range using a graph



Example Find the domain and range from an equation y = $\pm\sqrt{25-x^2}$