## Functions and Relations



Relations are sets of ordered pairs. They can be shown in a variety of ways. Some relations are also functions. Functions are a special type of relation To be a function there can only be one output assigned to each input.

| Representation | Function | not a Function |
| :---: | :---: | :---: |
| List of Ordered Pairs <br> *Remember ordered pairs are written <br> $(x, y)$ | $\begin{gathered} \{(6,2),(3,5), \\ (9,0),(5,7),(8,7)\} \end{gathered}$ | $\begin{gathered} \{(3,2),(5,7),(1,4), \\ (9,2),(3,7)\} \end{gathered}$ |
| Table | $X$ -3 0 3 8 -10 <br> $Y$ 6 8 20 4 8 | X -2 0 -2 7 -8 <br> Y 6 8 20 4 8 |
| Graph |  |  |
| mapping |  |  |

