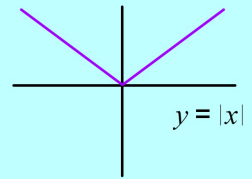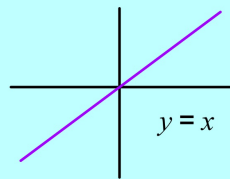# Functions

The Modulus Function

The modulus, or "absolute value" of x is denoted $|x|$ and is defined as

$$|x| = \begin{cases} x \text{ when } x \geq 0 \\ -x \text{ when } x < 0 \end{cases}$$

e.g. $|3| = 3$ $\quad |-3| = 3$

$y = x$

$y = |x|$

To draw $y = |f(x)|$, reflect the negative parts of the graph in the x-axis $y = f(x)$.

e.g.