## FUNCTIONS REVISITED

Which of the following relations is a function?
II. $\{(2,4),(1,1),(2,1)\}$
III. $\{(2,4),(1,4),(3,4)\}$
IV. $\{(2,4),(4,1),(3,2)\}$
A. I, II, and III only
B. II and IV only
C. III and IV only
D. I and II only

The graphing calculator can be used to evaluate functions for a given $x$ value. Here's how:

1) Press the $Y=$ button on your calculator.
2) Input the rule into $Y_{1}$, using the $X, T, \theta, n$ button for $x$.
3) Press $2 N D$ GRAPH to see the TABLE of values for the function.

If $f(x)=x^{2}+4 x$ and $g(x)=5-3 x$, find the following.

1. $f(-3)=$ $\qquad$
2. $g(-5)=$ $\qquad$
3. $f(1)+g(3)=$ $\qquad$ 4. $f(-2)-g(4)=$ $\qquad$
4. $2[g(-2)]+3[f(2)]=$ $\qquad$

Brain-Strain: For the function $f, f(8)=-3$, and $f(-3)=8$. If $y=f(x)$, what is the value of y when $\mathrm{x}=\mathbf{- 3}$ ?

## Use the graph to answer the following.


15. Find the domain and range.

D: $\qquad$
R: $\qquad$


