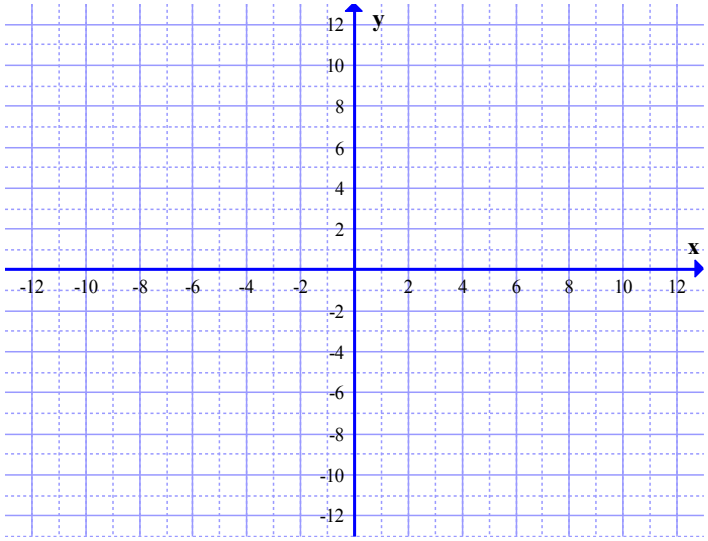
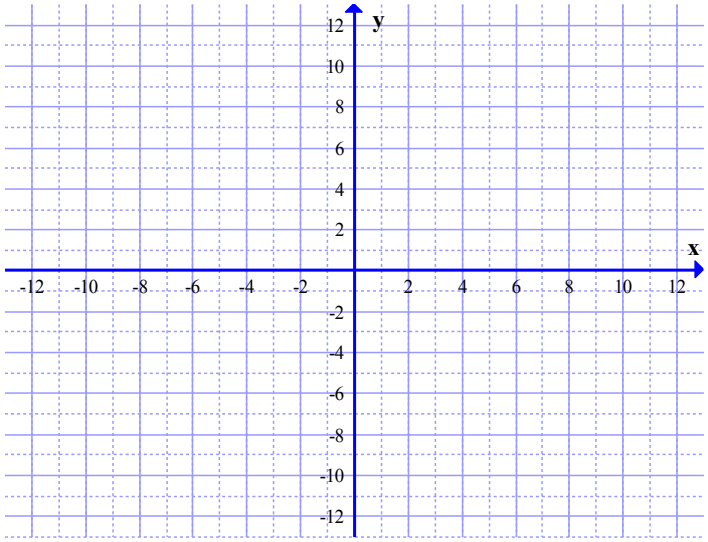
3.4 Practice Problems

1. Graph the following functions using the plotting points method.

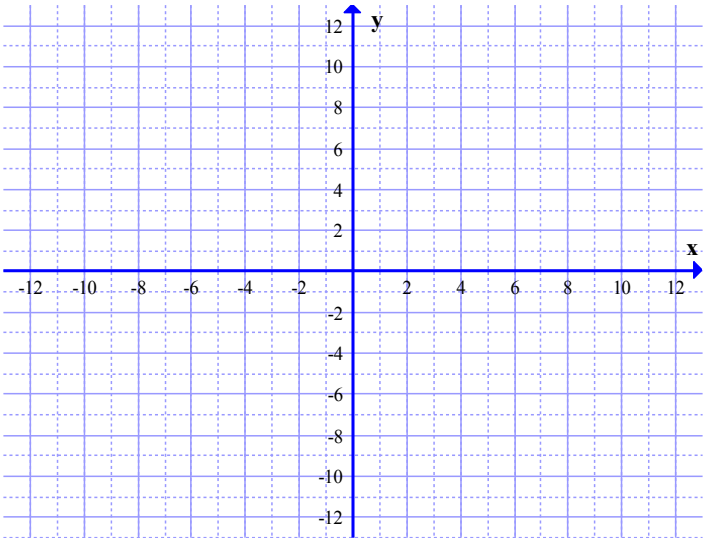
a. $f(x)=2x+3$



b. $g(x)=9-x^2$



c. $h(x)=-|x|+3$



2. Evaluate the Piecewise function.

$$f(x)=\begin{cases} 2x+3 & x\le 4 \\ -x-2 & x>4 \end{cases}$$

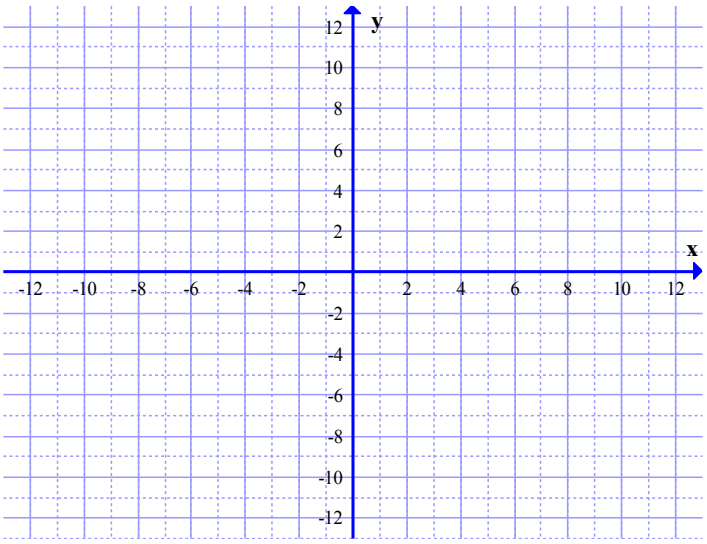
a. $f(2)$ b. $f(4)$ c. $f(6)$

3. $$f(x)=\begin{cases} 2x+3 & x\le 4 \\ -x-2 & x>4 \end{cases}$$

a. Find the domain for the function

b. Locate any intercepts.

c. Graph the function.



d. Based on the graph find the range.

e. Is the function continuous on its domain?