$\qquad$ Date: $\qquad$

| Learning Goal 0.1 | Expectations for graphing from previous years. |
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## More Questions

1. Determine whether each of the following graphs represents a function. If so, state the domain and range of the function.
a.

b.

c.

d.

2. Determine whether each of the following equations represents a function. State the domain and range of the function and draw a sketch of the relation labeling any important points.
a. $\quad y=-(x-4)^{2}+9$
b. $\quad y=\sqrt{x-3}+5$
c. $y=|x|-6$
d. $y=(x-2)^{2}(x+1)$
3. Consider the functions then evaluate.

$$
f(x)=(x-4)^{2}+2 \quad g(x)=\sqrt{x-5}
$$

a. $\quad f(-8)$
b. $\quad g(3)$
c. $\quad g(3 x-4)$
d. $\quad f(g(x))$

Example Use the graph of $f(x)$ to determine the following.
a. $f(-2)$
b. $\quad f(x)=4$
c. Domain
d. Range
e. Any local or global minimum value(s) of $f(x)$ and the value of $x$ for which that happens.
f. Any local or global maximum value(s) of $f(x)$ and the value of $x$ for which that happens.


