Name: $\qquad$ Date: $\qquad$

| Learning Goal 0.1 | Expectations for graphing from previous years. |
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## Let's start slowly!

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


Domain
Range
c.


Domain
Range
b.


Domain
Range
d.


Domain
Range

Example Determine whether each of the following equations represents a function. If so, state the domain and range of the function.
a. $y=2 x^{2}+5$
Domain
Range
c. $x=|y|$
Domain
Range
b. $\quad x^{2}+y^{2}=9$
Domain
Range
d. $y=\frac{1}{x-3}$
Domain
Range

Example Consider the functions then evaluate.

$$
f(x)=x^{2}-3
$$

a. $\quad f(2)$
c. $g(x-1)$

$$
g(x)=\frac{x}{x+2}
$$

b. $g(-3)$
d. $f(x+4)$

Example Use the graph of $f(x)$ to determine the following.
a. $f(-2)$
b. $\quad f(x)=2$
c. the zeros of the function.
d. the maximum of $f(x)$ and the value of $x$ for which that happens.


