

Homework: Homework 10.1

Save

Score: 1 of 1 pt

1 of 8 (3 complete)

HW Score: 37.5%, 3 of 8 pts

10.1.1

Question Help

Determine whether the correspondence is a function.

Domain	Range
19	16
24	10
6	16

Is this correspondence a function?

☐ No
☒ Yes

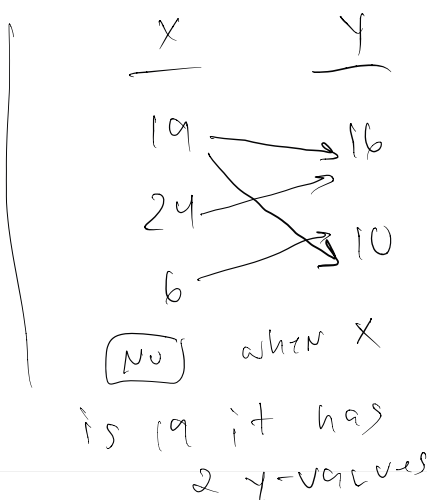
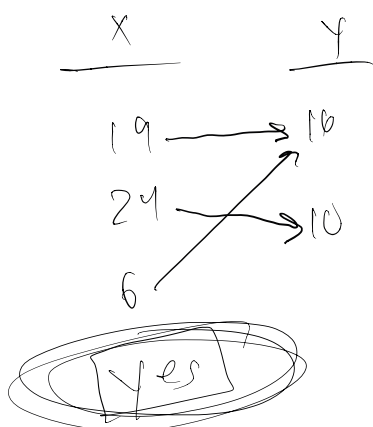
A Function each x value has only 1 y value

Question is complete.

All parts showing

Similar Question

• Domain - x-values
• Range - y-values



★ If x is repeated not a function
(19, 16)
(24, 10)
(16, 16)

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Score: 1 of 1 pt

2 of 8 (3 complete)

HW Score: 37.5%, 3 of 8 pts

10.1.3

Question Help

Determine whether the following rule defines y as a function of x .

x	3	2	1	0	-1	-2	-3
y	9	4	1	0	1	4	9

Is x repeated?

Is y a function of x ?

- ☐ No
☒ Yes

No

It is a function

Question is complete.

All parts showing

Similar Question



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Score: 0 of 1 pt

3 of 8 (3 complete)

HW Score: 37.5%, 3 of 8 pts

10.1.33

Question Help



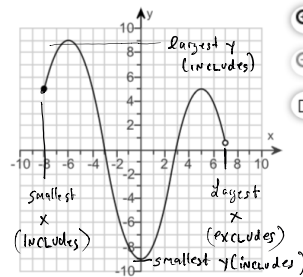
Give the domain and the range of the function in the graph.

The domain is .

(Type your answer in interval notation.)

Interval notation

- $[$, $($
- smallest number
- comma
- largest number
- $]$, $)$



show Domain & Range for graphs
we show in interval notation

Enter your answer in the answer box and then click Check Answer.



1 part remaining

Clear All

Check Answer



- $[]$ $\Rightarrow$ includes number
- $()$ $\Rightarrow$ excludes number

Domain $[-8, 7)$ Range $[-9, 9]$

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Score: 1 of 1 pt

4 of 8 (3 complete)

HW Score: 37.5%, 3 of 8 pts

10.1.35

Question Help

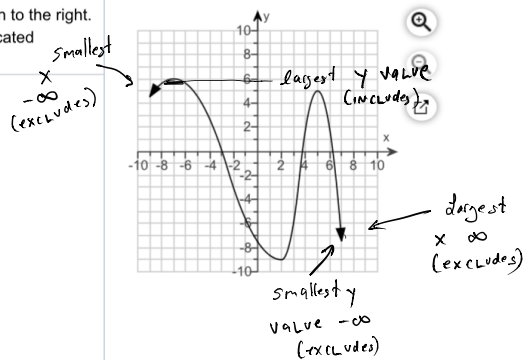
Give the domain and the range of the function whose graph is shown to the right. When arrows are drawn, assume the function continues in the indicated direction.

The domain is $(-\infty, \infty)$.

(Type your answer in interval notation.)

The range is $(-\infty, 6]$.

(Type your answer in interval notation.)



Question is complete.

All parts showing

Domain $(-\infty, \infty)$
Range $(-\infty, 6]$

Similar Question

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Score: 0 of 1 pt

5 of 8 (3 complete)

HW Score: 37.5%, 3 of 8 pts

10.1.53

Question Help

Find each of the following for $f(x) = 4x^2 - 6x + 6$.

(A) $f(x+h)$

(B) $f(x+h) - f(x)$

(C) $\frac{f(x+h) - f(x)}{h}$

(A) $f(x+h) =$

a)

$$f(x) = 4x^2 - 6x + 6$$

$$f(x+h) = 4(x+h)^2 - 6(x+h) + 6$$

$$= 4(x+h)(x+h) - 6(x+h) + 6$$

$$= (4x+4h)(x+h) - 6x - 6h + 6$$

$$= 4x^2 + 4xh + 4xh + 4h^2 - 6x - 6h + 6$$

$$= 4x^2 + 8xh + 4h^2 - 6x - 6h + 6$$

Enter your answer in the answer box and then click Check Answer.

2 parts remaining

Clear All

Check Answer

b) $f(x+h) - f(x)$

$$4x^2 + 8xh + 4h^2 - 6x - 6h + 6 - (4x^2 - 6x + 6)$$

$$4x^2 + 8xh + 4h^2 - 6x - 6h + 6 - 4x^2 + 6x - 6$$

$$8xh + 4h^2 - 6h$$

c) $\frac{f(x+h) - f(x)}{h}$

$$\frac{8xh + 4h^2 - 6h}{h}$$

$$= \frac{h(8x + 4h - 6)}{h} = 8x + 4h - 6$$



Homework: Homework 10.1

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Score: 0 of 1 pt

6 of 8 (3 complete)

HW Score: 37.5%, 3 of 8 pts

10.1.55

Question Help

For the function defined as follows, find a. $f(x+h)$, b. $f(x+h) - f(x)$, and c. $[f(x+h) - f(x)] / h$.

$$f(x) = \frac{3}{x}$$

a. $f(x+h) =$

$$\frac{3}{x+h}$$

b. $f(x+h) - f(x)$

$$\frac{3}{x+h} - \frac{3}{x}$$

LCD: $(x+h) \cdot x$

$$\begin{aligned} & \frac{x \cdot 3}{x \cdot (x+h)} - \frac{3(x+h)}{x \cdot (x+h)} \\ & \frac{3x}{x(x+h)} - \frac{3(x+h)}{x(x+h)} \end{aligned}$$

c. $f(x+h) - f(x)$

$$\frac{\frac{3}{x+h} - \frac{3}{x}}{h}$$

Enter your answer in the answer box and then click Check Answer.



2 parts remaining

$$\frac{3x - 3(x+h)}{x(x+h)}$$

$$\frac{3x - 3x - 3h}{x(x+h)}$$

$$\frac{-3h}{x(x+h)}$$

Clear All

Check Answer



$$\frac{-3h}{x(x+h)} \div \frac{h}{1}$$

$$\frac{-3h}{x(x+h)} \cdot \frac{1}{h}$$

$$\frac{-3}{x(x+h)}$$

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Score: 0 of 1 pt

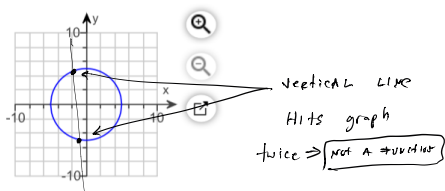
8 of 8 (3 complete)

HW Score: 37.5%, 3 of 8 pts

10.1.59

Question Help

Indicate whether the graph specifies a function.



- ☐ The graph does specify a function.
- ☐ The graph does not specify a function.

Click to select your answer and then click Check Answer.



All parts showing

Clear All

Final Check



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Score: 0 of 1 pt

7 of 8 (3 complete)

HW Score: 37.5%, 3 of 8 pts

10.1.57

Question Help

Determine if the graph is a function.

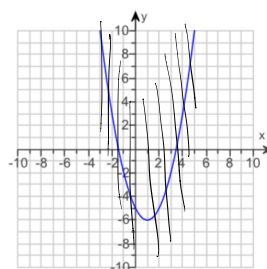
$$y = x^2 - 2x - 5$$

Using the vertical line test, is this the graph of a function?

☐ No

☒ Yes

, be cause each
vertical line hits
graph only once.



Click to select your answer and then click Check Answer.

All parts showing

Clear All

Final Check

Navigation buttons: back, forward, and a question mark icon.