EXERCISE...

1) Given $f(x) = x^2 + 2x - 1$, find $f(2)$.

2) Given $f(x) = x^2 + 2x - 1$, find $f(-3)$.

3) Given: $f(x) = -2 + 7x$ and $w(x) = x^2 - 7x + 3$

Find: $(a)\ f(w(-1))$ $(b)\ w[f(w(0))]$

Oct 30-11:21 PM

Let's bring in some algebra...

- Given that $f(x) = 3x^2 + 2x$, find $f(h)$.
- Given that $f(x) = 3x^2 + 2x$, find $f(x + h)$.

Oct 30-11:11 PM

Practice Problems...

Worksheet - Function Notation.pdf

Quiz material to this point ...

Apr 7-10:46 AM

SOLUTIONS...

Evaluate at the given number.

1) $f(x) = 3x - 8$
a. $f(1) = -5$
b. $f(-3) = -17$
c. $f(5) = 7$
d. $f(-6) = -26$
e. $f(0) = -8$

2) $f(x) = 2 - 4x$
a. $f(-5) = 22$
b. $f(-2) = 10$
c. $f(0) = 2$
d. $f(4) = -14$
e. $f(6) = -22$

5) $h(x) = 3x^2 + 7$
a. $h(-4) = 55$
b. $h(-2) = 19$
c. $h(0) = 7$
d. $h(3) = 34$
e. $h(5) = 82$

6) $h(x) = 5 - x^2$
a. $h(-4) = -11$
b. $h(-1) = 4$
c. $h(3) = -4$
d. $h(5) = -20$
e. $h(-7) = -44$

9) $h(x) = -x^2 + 6x - 4$
a. $h(-3) = -31$
b. $h(-1) = -11$
c. $h(0) = -4$
d. $h(3) = 5$
e. $h(6) = -4$

10) $h(x) = 7x - x^2 + 2$
a. $h(-4) = -20$
b. $h(-1) = 16$
c. $h(1) = 30$
d. $h(4) = 36$
e. $h(8) = 16$

Number Relations and Functions 10

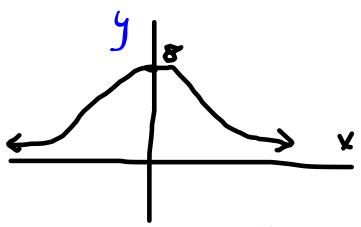
1. Evaluate the following expressions given the functions below:

$g(x) = -3x + 1$ $f(x) = x^2 + 7$ $h(x) = \frac{12}{x}$ $j(x) = 2x + 9$

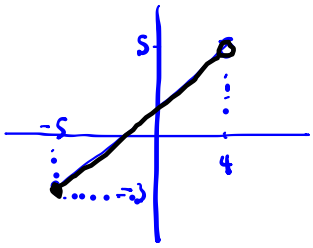
a. $g(10) = 29$
b. $f(3) = 16$
c. $h(-2) = -6$
d. $j(7) = 23$
e. $h(0) =$ undefined
f. $g(4) = -11$
g. $f(h(3)) = 23$
h. Find x if $g(x) = 16$ $x = -5$
i. Find x if $h(x) = -2$ $x = -6$
j. Find x if $f(x) = 23$ $x = \pm 4$

Apr 8-10:59 AM

Function / Nonfunction?
Domain?
Range?
Continuous or Discrete?



Function? Yes
Domain: $\{x \mid -\infty < x < \infty, x \in R\}$
Range: $\{y \mid -\infty < y < 8, y \in R\}$
Continuous or Discrete

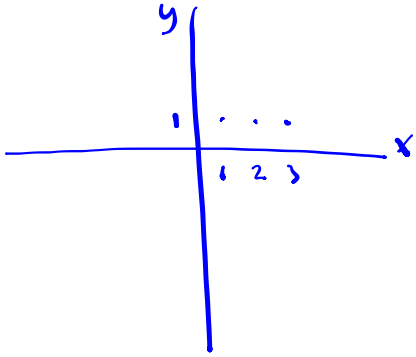


Function? Yes
Domain: $\{x \mid -5 \le x < 4, x \in R\}$
Range: $\{y \mid -3 \le y < 5, y \in R\}$
Continuous or Discrete

Nov 1-9:22 AM

Sport	equipment
bball	ball
hockey	stick
hockey	puck

function? No
Domain: {bball, hockey}
Range: {ball, puck, stick}
Continuous or Discrete



function? Yes
Domain: {1, 2, 3}
Range: {1}
Continuous or Discrete

Nov 1-9:27 AM

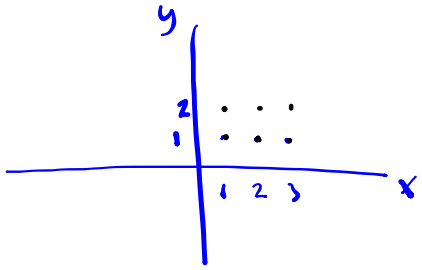
(2,3) (3,4) (5,10) (2,7)

function ? No

Domain: $\{2,3,5\}$

Range: $\{3,4,7,10\}$

Continuous or Discrete



function ? No

Domain: $\{1,2,3\}$

Range: $\{1,2\}$

Continuous or Discrete

Nov 1-9:30 AM

Attachments

Worksheet - Function Notation.pdf