Try This!!!

FROM LAST DAY

3. The equation $C = 25n + 1000$ represents the cost, C dollars, for a feast following an Arctic sports competition, where n is the number of people attending.
   a) Describe the function. Write the equation in function notation.
   b) Determine the value of $C(100)$. What does this number represent?
   c) Determine the value of n when $C(n) = 5000$. What does this number represent?

$C(n) = 25n + 1000$

x = # people, y = cost

n	C

a) $C(n) = 25n + 1000$

b) $C(100) = 25(100) + 1000$
$= 2500 + 1000$
$= 3500$

So if 100 people show up the event cost is $3500

c) $C(n) = 25n + 1000$

give = $C(n) = 5000$

$5000 = 25n + 1000$

Rearrange and solve

$5000 - 1000 = 25n + 1000 - 1000$

$4000 = 25n$

$\frac{4000}{25} = \frac{25n}{25}$

$160 = n$

So if the cost of supper is $5000 then 160 people show up.

Completed for Homework

Evaluating Functions

Show all work

1) *If* $f(x) = 3x^2 - x - 6$, *find...*

a) $f(5)$

b) f(-7)

c) f(-3)

SOLUTIONS

a) $f(x) = 3x^2 - x - 6$

$f(5) = 3(5)^2 - 5 - 6$

$= 3(25) - 5 - 6$

$= 75 - 5 - 6$

$= 64$

b) $f(x) = 3x^2 - x - 6$

$f(-7) = 3(-7)^2 - -7 - 6$

$= 3(49) - -7 - 6$

$= 147 - -7 - 6$

$= 147 + 7 - 6$

$= 148$

c) $f(x) = 3x^2 - x - 6$

$f(-3) = 3(-3)^2 - -3 - 6$

$= 3(9) - -3 - 6$

$= 27 - -3 - 6$

$= 27 + 3 - 6$

$= 24$

2) If g(x) = x + 3 and h(x) = -3x-2

a) g(5) b) g(7) c) h(-10) d) h(5)

e) g(h(4)) f) g(x) = 33 g) h(x)= -41

SOLUTIONS

a) g(x) = x + 3

g(5) = 5 + 3

= 8

b) g(x) = x + 3

g(7) = 7 + 3

= 10

c) h(x) = -3x-2

h(-10) = -3(-10) - 2

= 30 - 2

= 28

d) h(x) = -3x-2

h(5) = -3(5) - 2

= -15 - 2

= -17

e) g(h(4))

h(x) = -3x-2

h(4) = -3(4) - 2

= -12 - 2

= -14

g(x) = x + 3

g(-14) = -14 + 3

= -11

f) g(x) = 33

g(x) = x + 3

33 = x + 3

33- 3 = x + 3-3

30 = x

g) h(x) = -41

h(x) = -3x-2

-41 = -3x - 2

-41 + 2 = -3x -2+2

-39 = -3x

$\frac{-39}{-3} = \frac{-3x}{-3}$

13 = x

Worksheet

Quiz in two days (Wednesday, May 9)

QUIZ OUTLINE

x is not repeated vertical line test

is the graph a straight line

#1) Given two graphs state the

Domain, Range, if a Function/Non-Function, Linear/Non-Linear, Continuos/Discrete (10 points)

connect dots

#2) Evaluate G(x) a) when given an x b) when given a g(x)

(Ex $G(x) = -3x^2 - 5$ a) g(4) b) g(x) = -305)

#3) Word problem . With equation given

a) Given an equation, write it as function notation

b) Determine a value when given x, explain what the answer means

c) Determine a value of y, and explain what it means.

Attachments

FunctionNotationWorksheet.pdf