



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.
- Describe the function. $C(n) = 25n + 1000$
Write the equation in function notation.
 - Determine the value of $C(100)$.
What does this number represent?
 - Determine the value of n when $C(n) = 5000$.
What does this number represent?

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

$5000 = 25n + 1000$

Rearrange and solve

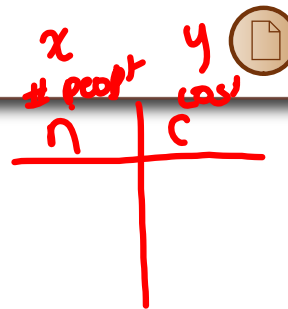
$5000 - 1000 = 25n + 1000 - 1000$

$4000 = 25n$

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

$160 = n$

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

$$\begin{aligned} f(5) &= 3(5)^2 - 5 - 6 \\ &= 3(25) - 5 - 6 \\ &= 75 - 5 - 6 \\ &= 64 \end{aligned}$$

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

$$\begin{aligned} f(-7) &= 3(-7)^2 - (-7) - 6 \\ &= 3(49) - (-7) - 6 \\ &= 147 - (-7) - 6 \\ &= 147 + 7 - 6 \\ &= 148 \end{aligned}$$

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

$$\begin{aligned} f(-3) &= 3(-3)^2 - (-3) - 6 \\ &= 3(9) - (-3) - 6 \\ &= 27 - (-3) - 6 \\ &= 27 + 3 - 6 \\ &= 24 \end{aligned}$$

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

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

do 1st find answer then do g(Any)

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

SOLUTIONS

a) $g(x) = x + 3$

$$\begin{aligned} g(5) &= 5 + 3 \\ &= 8 \end{aligned}$$

b) $g(x) = x + 3$

$$\begin{aligned} g(7) &= 7 + 3 \\ &= 10 \end{aligned}$$

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

$$\begin{aligned} h(-10) &= -3(-10) - 2 \\ &= 30 - 2 \\ &= 28 \end{aligned}$$

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

$$\begin{aligned} h(5) &= -3(5) - 2 \\ &= -15 - 2 \\ &= -17 \end{aligned}$$

e) $g(h(4))$

$$\begin{aligned} h(x) &= -3x - 2 \\ h(4) &= -3(4) - 2 \\ &= -12 - 2 \\ &= -14 \end{aligned}$$

$$g(-14) = x + 3$$

$$\begin{aligned} g(5) &= -14 + 3 \\ &= -11 \end{aligned}$$

f) $g(x) = 33$

$g(x) = x + 3$

$33 = x + 3$

$33 - 3 = x + 3 - 3$

$30 = x$

g) $h(x) = -41$

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

$-41 = -3x - 2$

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

$-39 = -3x$

$-39 = -3x$

$-3 = -x$

$13 = x$

Worksheet

Quiz in two days (Wednesday, May 9)

QUIZ OUTLINE

#1) Given two graphs state the

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

connect dots

x is not repeated
→ vertical line test

→ is the graph a straight line

#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