
Problem 1. (1 point)

Let $f(x) = x^2 + 1$. Evaluate the function for the following inputs:

$f(1) = \underline{\hspace{2cm}}$.

$f(-1) = \underline{\hspace{2cm}}$.

$f(6) = \underline{\hspace{2cm}}$.

$f(0) = \underline{\hspace{2cm}}$.

Answer(s) submitted:

- 2
- 2
- 37
- 1

(correct)

Problem 2. (1 point)

Let $f(x) = 4x + 5$. Evaluate the function for the following inputs:

$f(3) = \underline{\hspace{2cm}}$.

$f(-5) = \underline{\hspace{2cm}}$.

$f(6.7) = \underline{\hspace{2cm}}$.

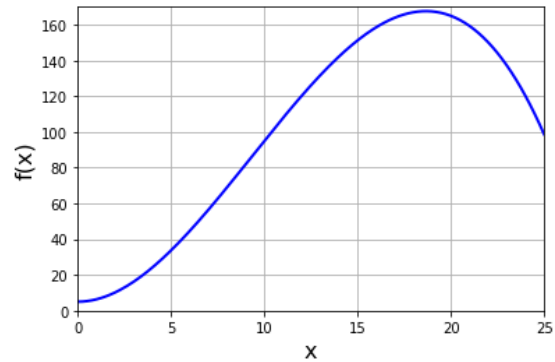
$f(0) = \underline{\hspace{2cm}}$.

Answer(s) submitted:

- 17
- -15
- 31.8
- 5

(correct)

Problem 3. (1 point)



A graph of a function is shown in the figure. Use the graph to determine the value of $f(x)$ for the following inputs:

$f(20) = \underline{\hspace{2cm}}$.

$f(10) = \underline{\hspace{2cm}}$.

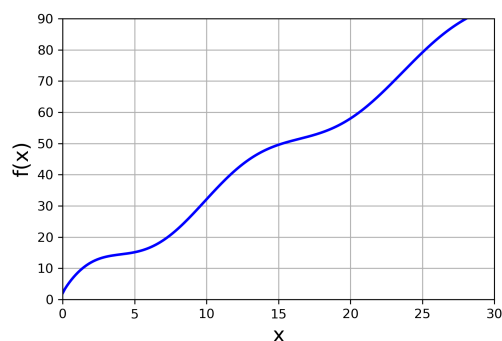
$f(5) = \underline{\hspace{2cm}}$.

Answer(s) submitted:

- 165
- 95
- 35

(correct)

Problem 4. (1 point)



A graph of a function is shown in the figure above. Use the graph to determine the value of $f(x)$ for the following inputs:

$f(5) = \underline{\hspace{2cm}}$.

$f(15) = \underline{\hspace{2cm}}$.

$f(0) = \underline{\hspace{2cm}}$.

Answer(s) submitted:

- 15
- 50
- 2

(correct)

Problem 5. (1 point)

Let $f(x) = x^2 + 4$. Compute the first 4 iterates of the seed $x_0 = 3$.

$x_1 = \underline{\hspace{2cm}}$.

$x_2 = \underline{\hspace{2cm}}$.

$x_3 = \underline{\hspace{2cm}}$.

$x_4 = \underline{\hspace{2cm}}$.

Answer(s) submitted:

- 13
- 173
- 29933
- 895984493

(correct)

Problem 6. (1 point)

Let $f(x) = 1x - 3$. Compute the first 4 iterates of the seed $x_0 = 3$.

$x_1 = \underline{\hspace{2cm}}$.

$x_2 = \underline{\hspace{2cm}}$.

$x_3 = \underline{\hspace{2cm}}$.

$x_4 = \underline{\hspace{2cm}}$.

Answer(s) submitted:

- 0
- -3
- -6
- -9

(correct)