



Evaluate Functions

40 Questions

NAME : _____

CLASS : _____

DATE : _____

1. If a question asks you to find $f(2)$, what does that mean?

a) Let $x = 2$

b) Let $y = 2$

2. How do you read $f(x)$?

a) f parenthesis x

b) f x

c) f with an x inside parenthesis

d) f of x

3. $f(x)$ is the same thing as _____.

a) x

b) an equation

c) y

d) input

4. What are the Order of Operations?

a) substitution, parentheses, multiplication/division, subtraction /addition

b) substitution, multiplication/ division, parentheses, addition/subtraction

c) substitution, parentheses, addition/subtraction, multiplication/division

5. What words can you use to help you solve simple expressions and equations?

a) Does McDonalds Sell Cheese Burgers

b) Sorry, Please Excuse My Dear Aunt Sally

c) Please Excuse My Uncle Henry

6. If $f(x) = 2x+1$, what would the function look like once you substitute in a 1 to find $f(1)$?

a) $f(1) = 2(1) + 1$

b) $f(x) = 21+1$

c) $f(1) = 2x(1) + 1$

7. Which shows the correct substitution for the problem:

"Evaluate $f(x) = x+5$ for $f(6)$ "

a) $6 = x + 5$

b) $f(6) = (6) + 5$

c) $f(x) = 6 + 5$

8. If $f(x) = 2x + 1$, what would be your first step to find $f(1)$?

a) Plug a 1 in for all the x's

b) Only plug a 1 into the left side

c) Set the function equal to 1

d) Only plug a 1 into the right side

9. Find and explain the error. $5 - 3 + 2 = 5 - 5 = 0$

a) Addition was done first and you should have subtracted first

b) There is no error.

c) There is a subtraction error

10. What would be my first step in solving this problem? $3 + 4(6) - 4$

a) multiplication

b) addition

c) parentheses

d) subtraction

11. What would be the 2nd step in solving this problem: $(4 - 2) + 9(7)$

a) subtraction

b) dividing

c) addition

d) multiplication

12. What are the steps to solve the following expression?

$$\frac{50 - 16}{2(12 + 4)}$$

a) parenthesesmultiplicationsubtractiondivision

b) parenthesesmultiplicationdivisionsubtraction

c) parenthesesdivisionmultiplicationsubtraction

13. Which operation would you do last in the following equation?

$$\frac{10 - 4}{1 + 5}$$

a) Division

b) Addition

c) Subtraction

14. What operation comes first and WHY? $(8 \times 7 - 6) \div 30$

- a) Multiplication, because you read left to right b) Multiplication, because it is inside the parenthesis
- c) Division, because it comes first alphabetically d) Subtraction, because it's easy and gives the answer 1

15. Max saw the following problem:

$$3 + 12(5 - 2) - 7$$

The first thing he did was add $3 + 12$ to get 15. What is Max's error?

- a) He should have subtracted $5 - 2$ first b) He did the correct thing first
- c) He should have multiplied $12 \cdot 5$ first

16. Which operation cannot be performed first?

$$6^2 + (-1 - 8) + 5 - 7(3 - 4)$$

- a) $3 - 4$ b) $-1 - 8$
- c) $5 - 7$ d) 6^2

17. $f(x) = 5x - 12$ What is $f(-4)$

- a) -32 b) 3
- c) -3 d) -12

18. Given $f(x) = \frac{1}{3}(x + 6)$ what is $f(-6)$?

- a) -6 b) $\frac{2}{3}$
- c) 0 d) -8

19. If $f(x) = 5 + 4(x - 4)^2$, what is $f(7)$?

- a) 41 b) 81
- c) 54 d) 29

20. Given $g(x) = 20x - 189$ what is $g\left(\frac{1}{2}\right)$?

- a) answer not here b) -179
- c) -189 d) 200

21. Given $h(x) = 3x^2 - 2x + 8$ what is $h(-1)$?

a) 16

b) 13

c) answer not here

d) 8

22. Given $h(x) = x^2 - 4$ what is $h(6)$?

a) 0

b) 32

c) 77

d) -4

23. Given $p(x) = 5x$ what is the value of $p\left(\frac{1}{5}\right)$?

a) 1

b) 0

c) 5

d) 10

24. Given $f(x) = \frac{3x + 2}{x - 1}$, What is $f(x)$?

a) -5

b) undefined

c) 5

d) 0

25. What is $f(5)$ for the function $f(x) = 2(x - 7)$

a) 3

b) -3

c) 1

d) -4

26. What is the value of y in the function
 $y = \frac{1}{2}x + 10$ when $x = 24$?

a) 58

b) 12

c) 29

d) 22

27. Given

$$f(x) = 2x^2 + 5x - 17, \text{ find } f(-1).$$

a) $f(-1) = -24$

b) $f(-1) = -20$

28. Evaluate $f(-3)$ when $f(x) = x^2 - 100$

a) -91

b) -6

c) -97

29. Evaluate the function for the given value: $h(t) = 2t^2 - 4t$. Find $h(-4)$.

a) -2

b) 48

c) 70

d) 96

30. Evaluate the function for the given value: $h(t) = -t + 3$. Find $h(-5)$.

a) 8

b) 6

c) 2

d) -7

31. Evaluate $g(t) = -2t^2 + 1$ for $g(-3)$

a) -17

b) 37

c) 19

d) -11

32. Given $h(x) = -x^2 + 3x$, find $h(5)$.

a) $h(5) = 40$

b) $h(5) = -10$

33. If $h(x) = 3 - 2x^2$

Find $h(-3)$.

a) 39

b) 21

c) -15

d) 33

34. Given $g(x) = 20(2)^x$, find $g(3)$.

a) 97

b) 120

c) 103

d) 160

35. If $g(x) = |3x + 2|$, find $g(-4)$.

a) -10

b) 10

c) 14

d) -14

36. If $c(x) = \sqrt{2x+5}$, find $c(10)$.

a) 25

b) 12.5

c) 5

37. Evaluate the function when $x = 4$.

$$f(x) = 18 - \frac{1}{2}x$$

a) 22

b) -16

c) 20

d) 16

38. Evaluate $g(t) = 3 + 4(t - 2)$ for $t = 10$

a) 36

b) 24

c) 12

d) 35

39. Evaluate the function $w(x) = 2x^3 + 3x$ for $w(3)$,

a) -5

b) 5

c) 450

d) 63

40. Evaluate $f(x) = -2x + 13$ for $f(-4)$.

a) 5

b) 21

c) 7

d) -8