

HW27A Part 1: Solving Functions

Solve the functions.

1) $f(x) = 4x - 10; f(x) = 2$

2) $h(x) = 4x + 2; h(x) = 10$

3) $f(x) = 2x - 2; f(x) = 2$

4) $w(a) = 4a - 1; w(a) = 11$

5) $f(x) = |x + 8|; f(x) = 2$

6) $f(x) = x + 10; f(x) = -20$

7) $f(x) = |3x + 4|; f(x) = 10$

8) $f(x) = |x + 6|; f(x) = 6$

9) $f(a) = 3a - 17; f(a) = -14$

10) $Bob(x) = |4x + 2|; Bob(x) = 8$

11) $f(x) = 2x + 8; f(x) = 13$

12) $f(x) = |2x + 7|; f(x) = -7$

13) $a(d) = |5 + 7d|; a(d) = 12$

14) $f(x) = |5x + 5|; f(x) = 5$

15) $f(x) = |3x - 2|; f(x) = -700000$

16) $f(x) = 7x - 3; f(x) = 2$

17) $f(x) = 8x - 2; f(x) = -10$

18) $r(w) = 2 + \frac{w}{2}; r(w) = 2$

Write the function definition.

1.

x	$f(x)$
-5	-15
-4	-12
0	0
1	3
2	6

2.

x	$g(x)$
-2	6
-1	7
0	8
1	9

3.

x	$g(x)$
-7	14
-3	6
0	0
2	-4
8	-16

4.

x	$f(x)$
-12	-48
0	0
2	8
3	12
8	32

5.

x	$f(x)$
0	-4
3	-1
4	0
6	2
24	20

6.

x	$j(x)$
-14	-7
0	0
8	4

7.

x	$m(x)$
-12	-4
-3	-1
3	1
9	3
15	5

8.

x	$l(x)$
-2	-9
-1	-8
0	-7
1	-6
2	-5

Identify the sequence as arithmetic, geometric, or neither.

9. 3, 6, 9, 12 ...
10. 14, 23, 34, 43, ...
11. 800, 400, 200, 100, ...

Identify the common difference and find the next three terms in the sequence.

12. 5, 10, 15, 20, ...
13. $-4, 6, 16, 26, \dots$
14. $0, -2, -4, -6, \dots$

Identify the common ratio and find the next three terms in the sequence.

15. 135, 45, 15, ...
16. 2, 6, 18, ...
17. 9, 18, 36, ...

Write the function definitions for the arithmetic sequences.

18. 5, 10, 15, 20, ...
19. $-4, 6, 16, 26, \dots$
20. $0, -2, -4, -6, \dots$

Write the function definitions for the geometric sequences.

21. 135, 45, 15, ...
22. 2, 6, 18, ...
23. $1, -2, 4, -8, \dots$