

Answers to HW27A Part 1: Solving Functions

1) $x = 3$

5) $x = -6, -10$

9) $a = 1$

13) $d = -\frac{17}{7}, 1$

17) $x = -1$

2) $x = 2$

6) $x = -30$

10) $x = -\frac{5}{2}, \frac{3}{2}$

14) $x = -2, 0$

18) $w = 0$

3) $x = 2$

7) $x = 2, -\frac{14}{3}$

11) $x = \frac{5}{2}$

15) No solution

4) $a = 3$

8) $x = 0, -12$

12) No solution

16) $x = \frac{5}{7}$

Algebra 1

HW27A Part 2: Answers

1. $f(x) = 3x$

2. $g(x) = x + 8$

3. $g(x) = -2x$

4. $f(x) = 4x$

5. $f(x) = x - 4$

9. Arithmetic

10. Neither

11. Geometric

12. Common difference: 5 Next three terms: 25, 30, 35

13. Common difference: 10 Next three terms: 26, 36, 46

14. Common difference: -2 Next three terms: -8, -10, -12

15. Common ratio: $\frac{1}{3}$ Next three terms: $5, \frac{5}{3}, \frac{5}{9}$

16. Common ratio: 3 Next three terms: 54, 162, 486

17. Common ratio: 2 Next three terms: 72, 144, 288

18. $a(n) = 5 + 5(n - 1)$

19. $a(n) = -4 + 10(n - 1)$

20. $a(n) = 0 + (-2)(n - 1)$

21. $g(n) = 135 * \left(\frac{1}{3}\right)^{n-1}$

22. $g(n) = 2 * 3^{n-1}$

23. $g(n) = 1 * (-2)^{n-1}$

6. $j(x) = \frac{1}{2}x$

7. $m(x) = \frac{1}{3}x$

8. $l(x) = x - 7$