

Secondary 1 Honors – Unit 3 Review Sheet ANSWERS

1. an adding or subtracting change, Arithmetic Sequences
2. a multiplying change, Geometric Sequences
3. Geometric because the sequence has a common ratio of $\cdot 3$
4. Arithmetic because the CROC is -3
5. Neither there isn't a CROC or common ratio between the terms
6. Arithmetic because the CROC is $+4.5$
7. Neither there isn't a CROC or common ratio between the terms
8. Geometric because the sequence has common ratio of $\cdot \frac{1}{2}$
9. R: $f(1) = 2$ $f(x) = f(x-1) \cdot 4$
E: $f(x) = 2(4)^{x-1}$
10. R: $f(1) = \frac{5}{6}$ $f(x) = f(x-1) + \frac{1}{3}$
E: $f(x) = \frac{1}{3}x + \frac{1}{2}$
11. R:
 $f(1) = -99$ $f(x) = f(x-1) \cdot \frac{1}{11}$
E: $f(x) = -99 \left(\frac{1}{11} \right)^{x-1}$
12. R:
 $f(1) = 46.7$ $f(x) = f(x-1) - 7.5$
E: $f(x) = -7.5x + 54.2$
13. R:
 $f(1) = -125$ $f(x) = f(x-1) \cdot \frac{1}{5}$
E: $f(x) = -125 \left(\frac{1}{5} \right)^{x-1}$
14. R: $f(1) = 7$ $f(x) = f(x-1) + 12$
E: $f(x) = 12x - 5$
15. R: $f(4) = 24$ $f(x) = f(x-1) \cdot \frac{1}{2}$
E: $f(x) = 24 \left(\frac{1}{2} \right)^{x-4}$
16. R:
 $f(9) = 6.5$ $f(x) = f(x-1) + 2.8$
E: $f(x) = 2.8x - 18.7$
17. R: $f(0) = 7$ $f(x) = f(x-1) \cdot 3$
E: $f(x) = 7(3)^x$
18. R:
 $f(1) = -17$ $f(x) = f(x-1) + 8$
E: $f(x) = 8x - 25$
19. R:
 $f(67) = 73$ $f(x) = f(x-1) - 4$
E: $f(x) = -4x + 341$
20. R: $f(1) = 8$ $f(x) = f(x-1) \cdot 2.5$
E: $f(x) = 8(2.5)^{x-1}$
21. R:
 $f(54) = 1863$ $f(x) = f(x-1) \cdot \frac{1}{3}$
E: $f(x) = 1863 \left(\frac{1}{3} \right)^{x-54}$
22. R: $f(-5) = 9$ $f(x) = f(x-1) \cdot 4$
E: $f(x) = 9(4)^{x+5}$
23. R:
 $f(-5) = 14$ $f(x) = f(x-1) - 6$
E: $f(x) = -6x - 16$
24. R: $f(0) = 57$ $f(x) = f(x-1) + 6$
E: $f(x) = 6x + 57$

25. R: $f(2) = 4$ $f(x) = f(x-1) + \frac{1}{2}$

E: $f(x) = \frac{1}{2}x + 3$

26. R: $f(0) = 4$ $f(x) = f(x-1) - 2$

E: $f(x) = -2x + 4$

27. R: $f(2) = 3$ $f(x) = f(x-1) \cdot 2$

E: $f(x) = 1.5(2)^{x-1}$

28. R: $f(-1) = 8$ $f(x) = f(x-1) \cdot \frac{1}{2}$

E: $f(x) = 8\left(\frac{1}{2}\right)^{x+1}$

29. $f(x) = x + 17$

30. $f(x) = 500\left(\frac{1}{3}\right)^x$

31. $f(x) = 55x - 250$

32. $f(x) = 2^{x-1}$

33. $f(8) = 64$

34. $f(14) = 212$

35. $f(-2) = 39$

36. $f(6) = -31,104$

37. $f(-4) = 13,122$

38. $f(7) = 72$

39.

$f(0) = 43$

$f(1) = 24$

$f(2) = 5$

$f(3) = -14$

$f(4) = -33$

$f(5) = -52$

40.

$f(0) = \frac{3}{2}$

$f(1) = 3$

$f(2) = 6$

$f(3) = 12$

$f(4) = 24$

$f(5) = 48$

41.

$f(0) = 3,072$

$f(1) = 768$

$f(2) = 192$

$f(3) = 48$

$f(4) = 12$

$f(5) = 3$

42.

$f(0) = -23$

$f(1) = -16$

$f(2) = -9$

$f(3) = -2$

$f(4) = 5$

$f(5) = 12$

43. 70, 138

44. -7, -2, 3

45. 72, 36

46. -18, -162, -1,458

47. R: $f(1) = 5$ $f(x) = f(x-1) + 4$

E: $f(x) = 4x + 1$

48. R: $f(1) = 1$ $f(x) = f(x-1) \cdot 3$

E: $f(x) = 3^{x-1}$

49. $f(x) = 4x - 1$

50. $f(x) = 6(3)^{x+1}$

51. $f(x) = -5x - 9$

52. $f(x) = 66\left(\frac{1}{2}\right)^{x-1}$

53. $f(x) = 43(2)^{x+3}$

54. $f(x) = 3x - 32$

55. Geometric

61.

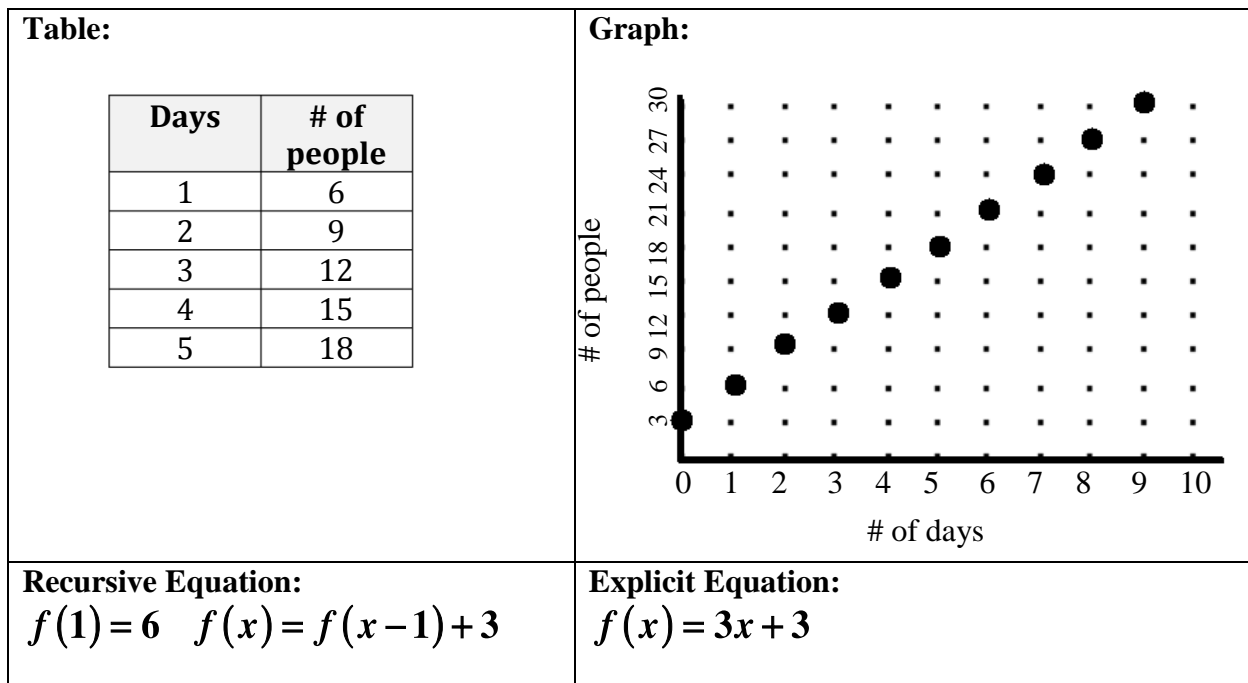
56. Geometric

57. Arithmetic

58. Arithmetic

59. Arithmetic

60. Geometric



62.

