

# HW 104

A2

1. 4, 7, 10, 13, 16

2. 5, 10, 20, 40, 80

3.  $-\frac{1}{2}, -2, -3.5, -5, -6.5$

4. 81, 54, 36, 24, 14

5. subtracting 2,  $u_0 = 22$

$$u_n = 22 - 2n$$

6. subtracting 15,  $u_0 = -17$

$$u_n = -17 - 15n$$

7. multiply by 3

$$u_n = 3(3)^{n-1}$$

8. add 6,  $u_0 = -101$

$$u_n = -101 + 6n$$

9. multiply by  $\frac{1}{3}$

$$u_n = 3\left(\frac{1}{3}\right)^{n-1}$$

10. subtract 0.3,  $u_0 = 5.3$

$$u_n = 5.3 - 0.3n$$

11. multiply by 0.1

$$u_n = 2(0.1)^{n-1}$$

12. multiply by 0.6

$$u_n = 1000(0.6)^{n-1}$$

13. a) +10, ~~2, 10~~  $u_n = -8 + 10n$

b)  $\cdot 6$ ,  $u_n = 2(6)^{n-1}$

14. a) -42,  $u_n = 98 - 42n$

b)  $\cdot \frac{1}{4}$ ,  $u_n = 56\left(\frac{1}{4}\right)^{n-1}$

15. a) -3,  $u_n = -3 - 3n$

b)  $\cdot 1.5$ ,  $u_n = -6(1.5)^{n-1}$