

— HW Day 2:

7. $a_n =$

a) $-4 + -2(n-1)$

$$a_n = a_{n-1} - 2$$

b) $a_n = 84 + -13(n-1)$

$$a_n = a_{n-1} - 13$$

$a_n =$
c) $19 + -6(n-1)$

$$a_n = a_{n-1} - 6$$

d) $a_n = 9 + 8(n-1)$

$$a_n = a_{n-1} + 8$$

e) $a_n = -3 + 2(n-1)$

$$a_n = a_{n-1} + 2$$

f) $a_n = 110 + -22(n-1)$

$$a_n = a_{n-1} - 22$$

7) $1, 3, 9, 27, 81$

$$a_8 = 2187$$

8) $2, \frac{1}{2}, \frac{1}{8}, \frac{1}{32}, \frac{1}{128}$

$$a_8 = \frac{1}{8192}$$

9) $-2.5, -10, -40, -160, -640$

$$a_8 = -40960$$

10) $-4, -12, -36, -108, -324$

$$a_8 = -8748$$

8) $a_n = 6(n-1)$

9) $a_n = -4 + 2(n-1)$

10) $a_n = 8 + -4(n-1)$

1) $r = 2$
2, 4, 8, 16, 32
 $a_n = 2(2)^{n-1}$

12) $r = -3$
-3, 9, -27, 81, -243
 $a_n = -3(-3)^{n-1}$

13) $r = 5$
2, 10, 50, 250, 1250
 $a_n = 2(5)^{n-1}$

14) $r = 3$
-3, -9, -27, -81, -243
 $a_n = -3(3)^{n-1}$

15) .8, 4, 20, -100, 500
 $a_n = 0.8(-5)^{n-1}$

16) 1, 2, 4, 8, 16
 $a_n = 1(2)^{n-1}$

17) $a_n = 6 \cdot a_{n-1}$
-4, -24, -144, -864

18) $a_n = a_{n-1} \cdot 6$
4, 24, 144, 864

19) $a_n = 6(a_{n-1})$
2, 12, 72, 432

20) $a_n = 4(a_{n-1})$
-4, -16, -64, -256