$a_{k+1}=\frac{1}{2}a_k, a_1=48,$ *find* a_5

2

$a_{k+1}=-a_k, a_1=2,$ *find* a_3

$a_{k+1}=a_k+3, a_1=2,$ *find* a_3

8

$a_{k+1}=a_k-3, a_1=5,$ *find* a_4

$1/3$

$a_k=\frac{3}{k},$ *find* a_9

1

$a_k=3\times 2^k,$ *find* a_3

$u_k=5\times\left(\frac{1}{5}\right)^k,$ *find* u_1

3

$u_{k+1}=u_k^2-2, u_1=\sqrt{2},$ *find* u_3

$u_{k+1}=\frac{1}{2}u_k^2, u_1=u_k,$ *find* u_4

$\frac{1}{256}$

$\sum_1^{10} 10^{k-1}$

6

$u_k=3(k-1),$ *find* u_3

-4

$u_{k+1}=u_k+3u_k, u_1=3,$ *find* u_5

81

$u_k=5(k+1),$ *find* u_{10}

55

$\sum_1^6 (8k-1)$

8

$\sum_1^k \left(\frac{1}{2}\right)^{k-1}$ *find last term*

24

$a_k=2k+1,$ *find* a_5

$a_k=5k-1,$ *find* a_1

4

-2

$\sum_1^4 k$

10

$2, -2, 2, -2, 2, -2, \ldots$

oscillating

$-2+5+12+19$ *in* $\sum$ *form*

$\sum_1^4 (7k-9)$

$4+6+8+10$ *in* $\sum$ *form*

$\sum_1^4 (2k+2)$

162

general term $4\times\left(\frac{1}{2}\right)^{k-1}$

$4, 2, 1, \frac{1}{2}, \ldots$

General term $2\times 3^{k-1}$

$2, 6, 18, 54, 162, \ldots$

11

$1+10+\ldots+10^9$ *in* $\sum$ *form*

30

periodic, period 3

general term $11-3r$

70

$\sum_5^5 (1-5k)$

$\sum_1^4 k^2$

$\sum_1^5 2(k-1)$

$\frac{2}{1}/1$

0

$\sum_1^4 (-1)^r$

$1, 2, 3, 1, 2, 3, 1, 2, 3, \ldots$

$2, 6, 10, 14, \ldots$

r^{th} *term* $4r-2$

$8, 5, 2, -1, \ldots$