

Числовые последовательности

*Примеры для
закрепления
материала*



$$a_{n+1} = a_n + d$$

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

$$d = 8$$

$$a_{n+1} = a_n - 10$$

$$d = -10$$

$$a_{n+1} = a_n + 4$$

$$d = 4$$

$$a_{n+1} = a_n - 25$$

$$d = -25$$

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

$$d = 2$$

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

$$d = -1$$

$$a_{n+1} = a_n + 25$$

$$d = 25$$

$$a_{n+1} = a_n - 3$$

$$d = -3$$

2; 4; 6; 8; . . .

$$d = 2$$

$$d = a_2 - a_1 = 4 - 2$$

4; 9; 14; 19; ...

$$d = 5$$

$$d = a_2 - a_1 = 9 - 4$$

10; 7; 4; 1; ...

$$d = -3$$

$$d = a_2 - a_1 = 7 - 10$$

3; 7; 11; 15; ...

$$d = 4$$

$$d = a_2 - a_1 = 7 - 3$$

20; 15; 10; 5; ...

$$d = -5$$

$$d = a_2 - a_1 = 15 - 20$$

11; 8; 5; 2; . . .

$$d = -3$$

$$d = a_2 - a_1 = 8 - 11$$

$$-5; -3; -1; 1; \dots$$

$$d = 2$$

$$\begin{aligned} d &= a_2 - a_1 = -3 - (-5) \\ &= -3 + 5 = 2 \end{aligned}$$

-8; -6; -4; -2; ...

$$d = 2$$

$$\begin{aligned} d &= a_2 - a_1 = -6 - (-8) \\ &= -6 + 8 = 2 \end{aligned}$$

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

$$d = 8$$

2; 4; 6; 8; . . .

$$d = 2$$

$$d = a_2 - a_1 = 4 - 2$$

$$a_{n+1} = a_n - 10$$

$$d = -10$$

4; 9; 14; 19; ...

$$d = 5$$

$$d = a_2 - a_1 = 9 - 4$$

$$a_{n+1} = a_n + 4$$

$$d = 4$$

10; 7; 4; 1; ...

$$d = -3$$

$$d = a_2 - a_1 = 7 - 10$$

$$a_{n+1} = a_n - 25$$

$$d = -25$$

3; 7; 11; 15; ...

$$d = 4$$

$$d = a_2 - a_1 = 7 - 3$$

$$a_{n+1} = a_n + 7$$

$$d = 7$$

20; 18; 16; 14; ...

$$d = -2$$

$$d = a_2 - a_1 = 18 - 20$$

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

$$d = -1$$

11; 7; 3; -1; ...

$$d = -4$$

$$d = a_2 - a_1 = 7 - 11$$

$$a_{n+1} = a_n + 28$$

$$d = 28$$

$$-5; -1; 3; 7; \dots$$

$$d = 4$$

$$\begin{aligned} d &= a_2 - a_1 = -1 - (-5) \\ &= -1 + 5 = 4 \end{aligned}$$

$$a_{n+1} = a_n - 3$$

$$d = -3$$

-8; -5; -2; 1; ...

$$d = 3$$

$$\begin{aligned} d &= a_2 - a_1 = -5 - (-8) \\ &= -5 + 8 = 3 \end{aligned}$$

$$a_n = a_1 + d(n-1)$$

$$S_n = \frac{a_1 + a_n}{2} n$$