

Name : \_\_\_\_\_

## Arithmetic Sequence

Sheet 1

Write the arithmetic sequence using recursive formula.

1)  $a_n = a_{n-1} - 55 ; a_1 = 6$

\_\_\_\_\_

2)  $a_n = a_{n-1} + 8.5 ; a_1 = 33$

\_\_\_\_\_

3)  $a_n = a_{n-1} + 82 ; a_1 = -21$

\_\_\_\_\_

4)  $a_n = a_{n-1} + \frac{1}{4} ; a_1 = 8$

\_\_\_\_\_

5)  $a_n = 150 + a_{n-1} ; a_1 = 2$

\_\_\_\_\_

6)  $a_n = a_{n-1} - 12 ; a_1 = -9$

\_\_\_\_\_

7)  $a_n = a_{n-1} + 5 ; a_1 = -\frac{1}{8}$

\_\_\_\_\_

8)  $a_n = a_{n-1} + 20 ; a_1 = 50$

\_\_\_\_\_

9)  $a_n = a_{n-1} - 36 ; a_1 = 7$

\_\_\_\_\_

10)  $a_n = a_{n-1} + 42 ; a_1 = -24.3$

\_\_\_\_\_

**Arithmetic Sequence**

Write the arithmetic sequence using recursive formula.

1)  $a_n = a_{n-1} - 55 ; a_1 = 6$

**6, -49, -104, -159, ...**

2)  $a_n = a_{n-1} + 8.5 ; a_1 = 33$

**33, 41.5, 50, 58.5, ...**

3)  $a_n = a_{n-1} + 82 ; a_1 = -21$

**-21, 61, 143, 225, ...**

4)  $a_n = a_{n-1} + \frac{1}{4} ; a_1 = 8$

**8,  $\frac{33}{4}$ ,  $\frac{17}{2}$ ,  $\frac{35}{4}$ , ...**

5)  $a_n = 150 + a_{n-1} ; a_1 = 2$

**2, 152, 302, 452, ...**

6)  $a_n = a_{n-1} - 12 ; a_1 = -9$

**-9, -21, -33, -45, ...**

7)  $a_n = a_{n-1} + 5 ; a_1 = -\frac{1}{8}$

 **$-\frac{1}{8}$ ,  $\frac{39}{8}$ ,  $\frac{79}{8}$ ,  $\frac{119}{8}$ , ...**

8)  $a_n = a_{n-1} + 20 ; a_1 = 50$

**50, 70, 90, 110, ...**

9)  $a_n = a_{n-1} - 36 ; a_1 = 7$

**7, -29, -65, -101, ...**

10)  $a_n = a_{n-1} + 42 ; a_1 = -24.3$

**-24.3, 17.7, 59.7, 101.7, ...**