

Skill Set 14 – Constant difference (Patterns)

Sequence number	Value
1	3
2	5
3	7
4	9
5	11
6	13
7	15

(i): Find the value for Sequence number 10

(ii): In which sequence number will the value be 101?

(i): There is a constant difference of 2 for the value of each succeeding Sequence number,

$$10 - 7 = 3$$

$$\text{Value of Sequence number 10} = 15 + 2 \times 3 = \mathbf{21}$$

$$(ii): 101 - 3 = 98$$

$$98 \div 2 = 49$$

$49 + 1 = \mathbf{50}$ (Since the value of each succeeding sequence number increases by 2.)

101 corresponds to Sequence number **50**.