

Ex 5.2

PVJ

19) basic salary = ₹5000
Salaries in Succ. years
are
₹ 5000, ₹5200, ₹5400,

$$a = 5000, d = 200$$

$$a_n = 7000$$

$$a + (n-1)d = 7000$$

$$5000 + (n-1)200 = 7000$$

$$(\div 200)$$

$$25 + n - 1 = 35$$

$$\Rightarrow n + 24 = 35$$

$$\Rightarrow n = 11$$

11th year.

20) weekly saving

5, 6.75, 8.50, ..., 20.75

$$a = 5, d = 1.75$$

$$a_n = 20.75$$

$$a + (n-1)d = 20.75$$

$$5 + (n-1)1.75 = 20.75$$

$$\Rightarrow (n-1)1.75 = 15.75$$

$$\Rightarrow n-1 = \frac{15.75}{1.75} = 9$$

$$\Rightarrow n = 10$$

10th week