

① i $a=7, d=3, n=8$

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

$$= 7 + 7 \times 3$$

$$= 28$$

1① $a=-18, d=9, n=10, a_n=0$

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

$$0 = -18 + 9d$$

$$\Rightarrow 9d = 18$$

$$\Rightarrow d = \frac{18}{9}$$

1① $a=?, d=-3, n=18, a_n=-5$

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

$$-5 = a + 17 \times (-3)$$

$$\Rightarrow a = -5 + 51$$

$$= 46$$

1① $a=-18.9, d=2.5, a_n=36$
 $n=?$

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

$$36 = -18.9 + (n-1)2.5$$

$$\Rightarrow (n-1)2.5 = 22.5$$

$$\Rightarrow n-1 = \frac{22.5}{2.5}$$

$$\Rightarrow n = 10$$

1① $a=3.5, d=0, n=105,$

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

$$= 3.5 + (105-1)0$$

$$= 3.5$$

2① $10, 7, 4, \dots$

$$a=10, d=7-10$$

$$= -3$$

$$a_{30} = a + 29d$$

$$= 10 + 29(-3)$$

$$= 10 - 87$$

$$= -77 \quad (C)$$

2① $-3, -\frac{1}{2}, 2, \dots$

$$a=-3, d=-\frac{1}{2}+3$$

$$= \frac{5}{2}$$

$$a_{11} = a + 10d$$

$$= -3 + 10 \times \frac{5}{2}$$

$$= -3 + 25$$

$$= 22 \quad (B)$$

3① $2, \boxed{14}, 26$

$$2d = 26 - 2$$

$$\Rightarrow d = \frac{24}{2}$$

$$\therefore a_2 = 2 + 12$$

$$= 14$$

3① $\boxed{18}, 13, \boxed{8}, 3$

$$2d = 3 - 13$$

$$\Rightarrow d = \frac{-10}{2}$$

$$a_1 = a_2 - (-5)$$

$$= 13 + 5$$

$$= 18$$

$$a_3 = a_2 + d$$

$$= 13 + (-5)$$

$$= 13 - 5$$

$$= 8$$