

$$① i \quad a=7, d=3, n=8$$

$$\begin{aligned} a_n &= a + (n-1)d \\ &= 7 + 7 \times 3 \\ &= 28 \end{aligned}$$

$$1① a=-18, d=9, m=10, a_n=0$$

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

$$0 = -18 + 9d$$

$$\Rightarrow 9d = 18$$

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

$$1①① a=?, d=-3, n=18, a_n=-5$$

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

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

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

$$= 46$$

$$1① a = -18.9, d = 2.5, a_n = 36$$

$$n = ?$$

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

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

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

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

$$\Rightarrow n = 10$$

$$1① a = 3.5, d = 0, n = 105,$$

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

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

$$= 3.5$$

$$2① 10, 7, 4, \dots$$

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

$$= -3$$

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

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

$$= 10 - 87$$

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

$$2①① -3, -\frac{1}{2}, 2, \dots$$

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

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

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

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

$$= -3 + 25$$

$$= 22 \quad (B)$$

$$3① 2, \boxed{14}, 26$$

$$2d = 26 - 2$$

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

$$\therefore a_2 = 2 + 12$$

$$= 14$$

$$3①① \boxed{18}, 13, \boxed{8}, 3$$

$$2d = 3 - 13$$

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

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

$$= 13 + 5$$

$$= 18$$

$$a_3 = a_2 + d$$

$$= a_2 + (-5)$$

$$= 13 - 5$$

$$= 8$$