

$$a_6 = 49$$

$$a_n = a_1 + d(n-1)$$

$$a_{20} = 7$$

$$\begin{aligned} a_6 &= a_5 + d = a_4 + 2d = \\ &= a_3 + 3d = a_2 + 4d = \\ &= a_1 + 5d. \quad \Rightarrow \end{aligned}$$

$$S_{12} = ?$$

$$\Rightarrow a_{20} = a_6 + 14d.$$

$$7 = 49 + 14d$$

$$14d = -42$$

$$d = -3$$

$$S_n = \frac{a_1 + a_n}{2} \cdot n$$

$$49 = a_1 + 5 \cdot (-3)$$

$$49 = a_1 - 15$$

$$a_1 = 64, \quad a_{12} = 64 - 3 \cdot 11 = 31$$

$$S_{12} = \frac{64 + 31}{2} \cdot 12; \quad S_{12} = 570$$