

**1**

$$a_{11} = a_1 + 10d$$

**2**

$$a_5 = a_1 + 4d$$

$$a_5 = -4 + 4 \cdot 7 = 24$$

$$S_5 = \frac{2a_1 + d(n-1)}{2} \cdot n$$

$$S_5 = \frac{2 \cdot (-4) + 7 \cdot 4}{2} \cdot 5 = \frac{-8 + 28}{2} \cdot 5 = 50$$

**3**

$$d = \frac{a_n - a_k}{n - k}$$

$$d = \frac{80 - 20}{5} = 12$$