

$$\begin{aligned}
 2) \quad n &= a + (n-1)d \\
 &= 180 + (n-1)5 \\
 &= 180 + 5n - 5 \\
 &\quad -175 = 5n
 \end{aligned}$$

$$n = \frac{175}{5} \quad \therefore n = 35$$

$$\begin{aligned}
 S_n &= \frac{n}{2} [2a + (n-1)d] \\
 &= \frac{35}{2} [2 \times 180 + (35-1)5] \\
 &= \frac{35}{2} [360 + (34)5] \\
 &= \frac{35}{2} [360 + 170] \\
 &= 17.5 (530) \\
 &= 9275,
 \end{aligned}$$

$$3) \quad \frac{1}{2}, \frac{3}{2}$$

$$2c = \frac{1}{2}, \quad 2c = \frac{3}{2} \quad (1)$$

$$22c = 1, \quad 22c = 3 \quad (2)$$

$$22c - 1 = 0, \quad 22c - 3 = 0$$

$$(22c-1)(22c-3) = 0$$

$$47c^2 - 67c - 22c + 3 = 0$$

$$47c^2 - 89c + 3 = 0$$

$$1) \quad a + (n-1)d = 11$$

$$-10 + 4d = 11$$

$$4d = 11 + 10$$

$$4d = 21$$

$$d = \frac{21}{4} = 5.25 \quad \therefore (-10 + 4d) = 11$$

$$S_n = \frac{n}{2} [a + (n-1)d]$$

$$= \frac{15}{2} [31] = \frac{465}{2}$$

$$= 232.5$$