Are the following sequences arithmetic? If so, what is the common difference and the explicit formula?

1) $183, 1835, 18355, 183555$

$$d_1 = 1835 - 183 = 1652$$

$$d_2 = 18355 - 1835 = 16520$$

$$d_1 \neq d_2$$

So it is not an arithmetic sequence

2) $-1, 1, 4, 8$

$$d_1 = 1 - (-1) = 2$$

$$d_2 = 4 - 1 = 3$$

$$d_1 \neq d_2$$

So it is not an arithmetic sequence

3) $-35, -42, -49, -56$

$$d_1 = -42 - (-35) = -7$$

$$d_2 = -49 - (-42) = -7$$

$$d_3 = -56 - (-49) = -7$$

$$d_1 = d_2 = d_3 = d$$

So it is arithmetic sequence $a_1 = -35, d = -7,\ a_n = a_{n-1} - 7$

4) $9, 0, -9, -18$

$$d_1 = 0 - 9 = -9$$

$$d_2 = -9 - 0 = -9$$

$$d_3 = -18 - (-9) = -9$$

$$d_1 = d_2 = d_3 = d$$

So this is arithmetic sequence $a_1 = 9, d = -9,\ a_n = a_{n-1} - 9$

5) $9, 17, 25, 33$

$$d_1 = 17 - 9 = 8$$

$$d_2 = 25 - 17 = 8$$

$$d_3 = 33 - 25 = 8$$

$$d_1 = d_2 = d_3 = d$$

So it is arithmetic sequences $a_1 = 9, d = 8,\ a_n = a_{n-1} + 8$

6) 2,5,10,17

$$d_1 = 5 - 2 = 3$$

$$d_2 = 10 - 5 = 5$$

$$d_1 \neq d_2$$

So this is not an arithmetic sequence