The 5th term of an arithmetic sequence is 35 and the 10th term is 85. What is the 20th term?

$$\underline{\ }\ ,\ \underline{\ }\ ,\ \underline{\ }\ ,\ \underline{\ }\ ,\ 35\ ,\ \underline{\ }\ ,\ \underline{\ }\ ,\ \underline{\ }\ ,\ \underline{\ }\ ,\ 85\ ,\ \dots$$

U_5 U_{10}
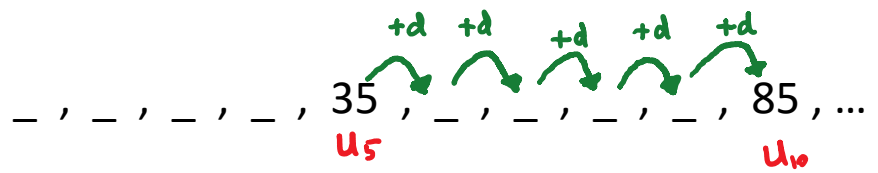
85 = 35 + 5d

50 = 5d

10 = d

$U_n = U_1 + (n-1)d$

$U_{20} = U_1 + 19d$

$U_{20} = U_{10} + 10d$

$U_{20} = 85 + 10 \times 10$

$U_{20} = 185$