

### QUIZ 3

Consider the elliptic curve  $E$  defined over  $\mathbb{F}_{97}$  by the equation:

$$E: y^2 = x^3 + 2x + 3$$

Let  $P = (20, 34)$  on the curve. The order of  $P$  is  $n = 50$ .

Let  $Q = (44, 20) \in \langle P \rangle$ . By using Pohlig Helman attack, find  $l$  such that  $lP = Q$ .