Student Number:



Name: Bryan Hoang

6. (10 points) Answer:

Computing multiples of P in $E(\mathbb{F}_5)$ gives:

$$P = (4, 2),$$

$$2P = (3, 4),$$

$$3P = (2, 4),$$

$$4P = (0, 4),$$

$$5P = (0, 1)$$

$$= Q,$$

$$\Rightarrow \log_{P}(Q) = 5.$$