

$$(a) \quad 99 = 3^2 \times 11$$

$$\begin{aligned} \text{donc } \varphi(99) &= 99 \times \left(1 - \frac{1}{3}\right) \left(1 - \frac{1}{11}\right) \\ &= 99 \times \frac{2}{3} \times \frac{10}{11} \\ &= \underline{60} \end{aligned}$$

$$(b) \quad 69 = 3 \times 23$$

$$\begin{aligned} \text{donc } \varphi(69) &= 69 \times \left(1 - \frac{1}{3}\right) \left(1 - \frac{1}{23}\right) \\ &= 2 \times 22 \\ &= \underline{44} \end{aligned}$$