

1. Evaluate :  $i^{58}$

Ans)  $i^{58} =$

$$(i^4)^{14} \times i^2 =$$

$$(1)^{14} \times i^2 =$$

$$1 \times i^2 =$$

$$i^2 =$$

$$-1$$

2. Find the value of  $i^{96} + i^{-26}$

Ans)

$$\begin{aligned} i^{96} + i^{-26} \\ = 1 + \frac{1}{i^{26}} &= 1 + \frac{1}{-1} \\ &= \underline{\underline{0}} \end{aligned}$$