

$$(4U_5(105))^2 = 16 U_5(105)$$

$$\text{and } 16 \in U_5(105)$$

$$\left[\frac{16}{1} = 3 \frac{16}{15} \right]$$

$$\Rightarrow (4U_5(105))^2 = \underbrace{U_5(105)}_{\text{identity}}$$

$$\Rightarrow |4U_5(105)| = \boxed{2} \text{ } \mu$$