

$$\boxed{43} \quad (\cos 10^\circ + i \sin 10^\circ)^{36} = 1^{36} (\cos(36 \cdot 10^\circ) + i \sin(36 \cdot 10^\circ)) = 1 (\cos 360^\circ + i \sin 360^\circ) = 1 + i(0) = 1$$