4. By Eulers formula:

$$i = \underbrace{\cos\left(\frac{\pi}{2}\right)}_{0} + i\underbrace{\sin\left(\pi/2\right)}_{1} = e^{i\frac{\pi}{2}}$$

$$\Rightarrow \quad i = e^{\frac{i\pi}{2}}, \quad i^i = \left(e^{\frac{i\pi}{2}}\right)^i = e^{-\pi/2}$$

then $i^i = e^{-\pi/2}$ is real! (crazy!) $\qquad i^i = \frac{1}{e^{\pi/2}}$