

You are **strongly** encouraged to work in groups, following the procedure as in homework [MS09](#).

Exercise pCA 1. Express the given complex number in the form $a + ib$ with $a, b \in \mathbb{R}$.

ER 1.a. $(1 + i)^{20}$. Hint. Express $(1 + i)$ as $re^{i\theta}$.

ER 1.b. $\frac{1 - 2i}{2 + i}$. Hint. Multiply the numerator and denominator by the *complex conjugate* of $2 + i$, which is $2 - i$.