Practice Problems for Lecture 3

Name:

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1. Express the complex number $2 - i$ in polar form $re^{i\theta}$ for real numbers r, θ.
2. Express the complex number $2e^{(\pi/4)i}$ in the form $a + bi$ for real numbers a, b.
3. Compute the integral $\int_0^1 (5 + 3i)e^{8\pi it}dt$