

MA 166: Quiz 12

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April 21, 2016

You have **15 minutes** to complete this quiz. You may work in groups, but you are not allowed to use any other resources; that means no phones, computers, or your notes.

Problem 1. Sketch the curve with the polar equation:

$$r = \cos 3\theta; \quad -\frac{\pi}{6} \leq \theta \leq \frac{\pi}{6}.$$

Problem 2. Write the following complex numbers in the form $a + bi$:

(a) $\frac{2 + 3i}{1 - 5i}$;

(b) $e^{1 + \frac{3\pi}{4}i}$.