Instructions: Please submit solutions to the following problems. You are expected to submit a neat, legible assignment. Please staple your assignment, and include your tutorial information. Your assignment is due **in class** on Thursday, May 22.

1. Let $z = -1 + \sqrt{3}i, w = -2 - 2i$.

   (a) Find z, w in polar form.

   (b) Find $\left(\dfrac{w}{z}\right)^{18}$. Express your final answer in $x + iy$ form.

   (c) Find $z^{10} - 2w^3$. Express your final answer in $x + iy$ form.

2. 1.1.18
3. 1.2.4
4. 1.2.6
5. 1.2.12
6. 1.2.24
7. 1.3.2
8. 1.3.10