

Panel 13

Homework

- ① Finish:  $t^2 + 4 = 0$  factors into 2 quadratic polynomials with real coefficients.
- ② Read chapter 1.6 and memorize the terms & definitions
- ③ Describe / sketch the following sets:

a)  $\{z: \operatorname{Re}(z) > 1\}$       b)  $\{z: -1 < \operatorname{Im}(z) \leq 2\}$

c)  $\{z: |z - 2 - i| < 2\}$       d)  $\{z: |z + 3i| > 1\}$

e)  $\{z: z = r \operatorname{cis}(\theta), 0 < r < 1, -\pi/2 < \theta < \pi/2\}$

f)  $\{z: z = r \operatorname{cis}(\theta), r > 1, \pi/4 < \theta < \pi/3\}$

g)  $\{z: |z| < 1 \text{ or } |z - 4| < 1\}$

Which of the following terms apply to these sets:

domain, region, closed set, bounded set, open set