For problems 11-18: Plot each the complex number in the complex plane *(i.e., draw a BIG dot to locate the complex number z)* and write the complex number in polar form: \( z = r e^{i\theta} \) with \( \theta \) in radians AND in trigonometric form: \( z = r (\cos(\theta) + i \sin(\theta)) \) with \( \theta \) in degrees.

11. \( z = 1 + i \)

12. \( z = -1 + i \)
13. \( z = \sqrt{3} - i \)

14. \( z = 1 - i\sqrt{3} \)

15. \( z = -i3 \)
16. \( z = -3 \)

17. \( z = 4 - i4 \)

18. \( z = 9\sqrt{3} + i9 \)
39. Given \( z = 2 + i2 \) and \( w = \sqrt{3} - i \) find the product \( z \cdot w \) and ratio \( \frac{z}{w} \). Report your results in polar form, \( z = r e^{i\theta} \) with \( \theta \) in radians.

40. Given \( z = 1 - i \) and \( w = 1 - i\sqrt{3} \) find the product \( z \cdot w \) and ratio \( \frac{z}{w} \). Report your results in polar form, \( z = r e^{i\theta} \) with \( \theta \) in radians.

53°. Find all the complex roots of \( \sqrt[3]{1 + i} \). Report your results in polar form, \( z = r e^{i\theta} \) with \( \theta \) in radians AND in trigonometric form: \( z = r (\cos(\theta) + i \sin(\theta)) \) with \( \theta \) in degrees.