

Answers to Worksheet 30 - Lesson 80

1) $125i$

2) $-\frac{1}{486} - \frac{\sqrt{3}}{486} \cdot i$

3) $128 + 128i$

4) $16 + 16\sqrt{3} \cdot i$

5) -64

6) $2\text{cis}\frac{\pi}{6}, 2\text{cis}\frac{5\pi}{6}, 2\text{cis}\frac{9\pi}{6}$

7) $\sqrt{3}\text{cis } 0, \sqrt{3}\text{cis}\frac{\pi}{3}, \sqrt{3}\text{cis}\frac{2\pi}{3}, \sqrt{3}\text{cis}\pi, \sqrt{3}\text{cis}\frac{4\pi}{3}, \sqrt{3}\text{cis}\frac{5\pi}{3}$

8) $\sqrt{2}\text{cis}\frac{\pi}{20}, \sqrt{2}\text{cis}\frac{9\pi}{20}, \sqrt{2}\text{cis}\frac{17\pi}{20}, \sqrt{2}\text{cis}\frac{25\pi}{20}, \sqrt{2}\text{cis}\frac{33\pi}{20}$