5.5

1) $1\left(\cos(\frac{\pi}{4}) + i\,\sin(\frac{\pi}{4})\right) = \frac{\sqrt{2}}{2} + \frac{\sqrt{2}}{2}\,i$

2) $2\left(\cos(\pi) + i\sin(\pi)\right) = 2\,(-1 + i \cdot 0) = 2 \cdot (-1) = -2$

3) $\sqrt{2}\left(\cos(\frac{\pi}{6}) + i\,\sin(\frac{\pi}{6})\right) = \sqrt{2}\,\left(\frac{\sqrt{3}}{2} + \frac{1}{2}\,i\right) = \frac{\sqrt{6}}{2} + \frac{\sqrt{2}}{2}\,i$

4) $\frac{1}{2}\left(\cos(\frac{5\pi}{4}) + i\,\sin(\frac{5\pi}{4})\right) = \frac{1}{2}\,\left(-\frac{\sqrt{2}}{2} + i\,(-\frac{\sqrt{2}}{2})\right) = -\frac{\sqrt{2}}{4} - \frac{\sqrt{2}}{4}\,i$

5) $2\left(\cos(\frac{7\pi}{6}) + i\,\sin(\frac{7\pi}{6})\right) = 2\,\left(-\frac{\sqrt{3}}{2} + i\,(-\frac{1}{2})\right) = -\sqrt{3} - i$

6) $\sqrt{3}\left(\cos(\frac{7\pi}{3}) + i\,\sin(\frac{7\pi}{3})\right) = \sqrt{3}\,\left(\frac{1}{2} + i\,\frac{\sqrt{3}}{2}\right) = \frac{\sqrt{3}}{2} + \frac{3}{2}\,i$