

$$\underline{27} \quad r \operatorname{cis}(\theta + 360) = \operatorname{cis} 360 \cdot r \operatorname{cis} \theta = 1 \cdot z = x + iy$$

$$\underline{28} \quad r \operatorname{cis}(360 - \theta) = \operatorname{cis} 360 \cdot r \operatorname{cis}(-\theta) = 1 \cdot \bar{z} = x - iy$$

$$\underline{29} \quad r \operatorname{cis}(\theta + 180) = -1 \cdot r \operatorname{cis} \theta = -1 \cdot z = -x - iy$$

$$\underline{30} \quad r \operatorname{cis}(90 + \theta) = \operatorname{cis} 90 \cdot r \operatorname{cis} \theta = i z = i(x + iy) = -y + ix$$

$$\underline{31} \quad r \operatorname{cis}(90 - \theta) = \operatorname{cis} 90 \cdot r \operatorname{cis}(-\theta) = i \bar{z} = i(x - iy) = y + ix$$

$$\underline{32} \quad r \operatorname{cis}(\theta + 270) = \operatorname{cis} 270 \cdot r \operatorname{cis}(\theta) = -i z = -i(x + iy) = y - ix$$

$$\underline{34} \quad r \operatorname{cis}(45 + \theta) = \operatorname{cis} 45 \cdot r \operatorname{cis} \theta = \left(\frac{\sqrt{2}}{2} + \frac{\sqrt{2}}{2}i\right) z = \frac{\sqrt{2}}{2}(1+i)(x + iy) \\ = \frac{\sqrt{2}}{2}(x - y + i(x + y))$$

$$\underline{38} \quad r \operatorname{cis}(90 - \theta) = \operatorname{cis}(-90) \cdot r \operatorname{cis}(-\theta) = -i \cdot \bar{z} = -i(x - iy) = y - ix$$

$$\underline{35} \quad r \operatorname{cis}(120 - \theta) = \operatorname{cis} 120 \cdot r \operatorname{cis}(-\theta) = \left(-\frac{1}{2} + \frac{\sqrt{3}}{2}i\right) \bar{z} = \frac{1}{2}(-1 + \sqrt{3}i)(x - iy) \\ = \frac{1}{2}(-x + \sqrt{3}y + i(y + \sqrt{3}x))$$