

3.35
24

$$\begin{aligned}T_{0+1} &= \binom{12}{6} a^{12-6} b^6 = \binom{12}{6} (1+i)^{30} (\sqrt{3}+i)^{42} \\&= \binom{12}{6} (\sqrt{2} \operatorname{cis} 45)^{30} (2 \operatorname{cis} 30)^{42} = \binom{12}{6} 2^{57} \operatorname{cis} 270 \operatorname{cis} 180 \\&= \binom{12}{6} 2^{57} \operatorname{cis} 90 = 924 \cdot 2^{57} \cdot j = 231 \cdot 2^{59} j\end{aligned}$$

2.11