Four special values of the (Klein) modular invariant j

Suppose that j is (correctly) normalized with $j(i) = 1$, then

$$j\left(\frac{4\,(5\,i \pm 1)}{13}\right) =$$

$$= \left(\frac{\left(1-\sqrt{5}\right)^{37}}{2^{39}}\left(1190448488 - 858585699\,\sqrt{2} - 540309076\,\sqrt{5} + 374537880\,\sqrt{10} + \right.\right.$$
$$\left.\left. \pm i\sqrt{\sqrt{5}}\left(693172512 - 595746414\,\sqrt{2} - 407357424\,\sqrt{5} + 240819696\,\sqrt{10}\right)\right)\right)^{3},$$

$$j\left(\frac{5\,(4\,i \pm 1)}{17}\right) =$$

$$= \left(\frac{\left(1-\sqrt{5}\right)^{37}}{2^{39}}\left(1190448488 + 858585699\,\sqrt{2} - 540309076\,\sqrt{5} - 374537880\,\sqrt{10} + \right.\right.$$
$$\left.\left. \pm i\sqrt{\sqrt{5}}\left(693172512 + 595746414\,\sqrt{2} - 407357424\,\sqrt{5} - 240819696\,\sqrt{10}\right)\right)\right)^{3}.$$

These special values (along with other values) were derived in my article titled "On the Second Memoir of Évariste Galois' Last Letter"

http://SemjonAdlaj.com/