

! For an efficient use of these tables, first read [HowTo.pdf](#).

T2.29B. Integrands with the fourth roots of a quadratic and a biquadratic polynomial on the interval (b, y) .

$$1. \int_b^y \frac{dx}{[(a-x)(x-b)]^{1/4}} = \sqrt{a-b} \left\{ 2 \left[\mathbf{E} \left(\frac{1}{\sqrt{2}} \right) + E \left(\arccos \left(\frac{4(a-y)(y-b)}{(a-b)^2} \right)^{1/4}, \frac{1}{\sqrt{2}} \right) \right] \right. \\ \left. - \left[\mathbf{K} \left(\frac{1}{\sqrt{2}} \right) + F \left(\arccos \left(\frac{4(a-y)(y-b)}{(a-b)^2} \right)^{1/4}, \frac{1}{\sqrt{2}} \right) \right] \right\}, \quad a \geq y > b.$$

$$2. \int_b^y \frac{dx}{[(a-x)(x-b)]^{3/4}} = \frac{2}{\sqrt{a-b}} \left[\mathbf{K} \left(\frac{1}{\sqrt{2}} \right) + F \left(\arccos \sqrt{\frac{4(a-y)(y-b)}{(a-b)^2}}, \frac{1}{\sqrt{2}} \right) \right], \\ a \geq y > b.$$
