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

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T2.77A. Integrands involving inverse trigonometric functions and exponentials on the interval $(0, 1)$.

$$1. \int_0^1 (\arcsin x) e^{-bx} dx = \frac{\pi}{2b} [I_0(b) - \mathbf{L}_0(b)] - \frac{\pi e^{-b}}{2b}.$$

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$$2. \int_0^1 x (\arcsin x) e^{-bx} dx = \frac{\pi}{2b^2} [\mathbf{L}_0(b) - I_0(b) + b \mathbf{L}_1(b) - b I_1(b)] + \frac{1}{b}.$$

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