

C4282

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

C4282

**T2.34A.** Integrands involving exponentials and algebraic functions on the intervals  $(0, y)$ ,  $(0, 2y)$ ,  $(0, 2)$  and  $(-1, 1)$ .

$$1. \int_0^y \frac{e^{-qx}}{\sqrt{x}} dx = \sqrt{\frac{\pi}{q}} \operatorname{erf}(\sqrt{qy}), \quad q > 0.$$

C4282

$$2. \int_0^y \frac{x e^{-\mu x} dx}{\sqrt{y^2 - x^2}} = \frac{\pi y}{2} [\mathbf{L}_1(\mu y) - I_1(\mu y)] + y, \quad y > 0; \Re\{\mu\} > 0.$$

$$3. \int_0^{2y} \frac{(y-x)e^{-\mu x} dx}{\sqrt{2yx - x^2}} = \pi y e^{-y\mu} I_1(y\mu), \quad \Re\{\mu\} > 0.$$

C4282

$$4. \int_0^2 \frac{e^{-px} dx}{\sqrt{x(2-x)}} = \pi e^{-p} I_0(p), \quad p > 0.$$

$$5. \int_{-1}^1 \frac{e^{2x} dx}{\sqrt{1-x^2}} = \pi I_0(2).$$

C4282

C4282

C4282

C4282

C4282