

**“A BOY OR GIRL
 IS NOT PREPARED
 FOR THE HIGHER REACHES
 OF MATHEMATICAL
 INQUIRY OR PHILOSOPHICAL
 SPECULATION
 UNTIL THEY ARE
 FIRST OF ALL
 TOUGHENED IN THE SPIRIT
 BY ATHLETICS.”**

$$\begin{aligned}
 \int_0^{\infty} e^{-ax} \cos bx \, dx &= \frac{1}{a^2 + b^2} (a^2 \cos \frac{a}{b} \arctan \frac{a}{b}) \\
 \int_0^{\infty} e^{-ax} \sin bx \, dx &= \frac{1}{a^2 + b^2} (a^2 \sin \frac{a}{b} \arctan \frac{a}{b}) \\
 \int_0^{\infty} e^{-ax} \cos bx \, dx &= \frac{1}{a^2 + b^2} (a^2 \cos \frac{a}{b} \arctan \frac{a}{b}) \\
 \int_0^{\infty} e^{-ax} \sin bx \, dx &= \frac{1}{a^2 + b^2} (a^2 \sin \frac{a}{b} \arctan \frac{a}{b}) \\
 \int_0^{\infty} e^{-ax} \cos bx \, dx &= \frac{1}{a^2 + b^2} (a^2 \cos \frac{a}{b} \arctan \frac{a}{b}) \\
 \int_0^{\infty} e^{-ax} \sin bx \, dx &= \frac{1}{a^2 + b^2} (a^2 \sin \frac{a}{b} \arctan \frac{a}{b})
 \end{aligned}$$



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