

## Integrationsmethoden Lösungen

1.  $(x - 1)e^x + c$
2.  $(x^2 - 2x + 2)e^x + c$
3.  $3e^7 + \frac{1}{e}$
4.  $\frac{\alpha}{\alpha^2 + \omega^2} \left(1 - e^{-\frac{2\pi\alpha}{\omega}}\right)$
5.  $\frac{3}{2} \ln(t^2 + 1) + c$
6.  $\frac{1}{6} \sqrt{(2x^2 + 1)^3} + c$
7.  $e^2 - 1$
8.  $\frac{1}{2} (e^{2a} - e^{-2a})$
  
9.  $1 - 2 \ln 2$
10.  $\ln \frac{(x - 3)^2}{|x + 2|^3} + c$
11.  $2 + \ln 18$
12.  $\frac{1}{2}x^2 - \frac{1}{x - 1} + \ln [(x + 2)^2|x - 1|] + c$