LÖSUNG ZU 10:

h)

$$\int x^{\frac{13}{9}} dx = \frac{x^{1+\frac{13}{9}}}{1+\frac{13}{9}} + c = \frac{x^{\frac{22}{9}}}{\frac{22}{9}} + c = \frac{9x^{\frac{22}{9}}}{22} + c$$

Probe (Kontrolle durch Differenzieren):

$$F(x) = \frac{x^{\frac{22}{9}}}{\frac{22}{9}} + c$$

$$F'(x) = \frac{22}{9} \cdot \frac{x^{\frac{22}{9}-1}}{\frac{22}{9}} = x^{\frac{22}{9}-1} = x^{\frac{22}{9}-\frac{9}{9}} = x^{\frac{13}{9}}$$