

1 Integral

1.1 Delvis integrasjon

Resultat Anta $U(x), v(x)$ deriverbare

$$\frac{d}{dx}(U(x)V(x)) = V(x)U'(x) + U(x)V'(x)$$

$$\int \frac{d}{dx}(U(x)V(x))dx = \int (V(x)U'(x) + (U(x)V'(x)))dx$$

$$(U(x)V(x)) = (\int (V(x)U'(x)dx)) + ((x)V'(x)dx)$$

$$\int (U(x)V'(x)dx = U(x)V(x) - \int (V(x)U'(x)dx$$

$$\int (U)dv + UV - \int (V)dU$$