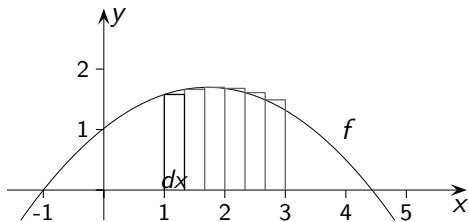
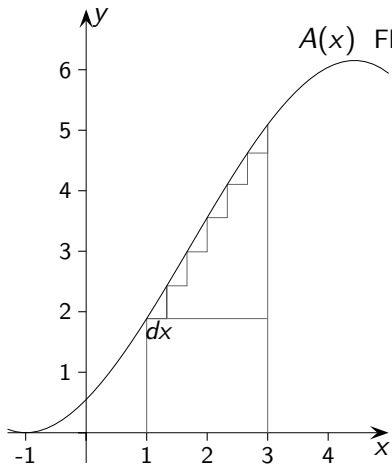
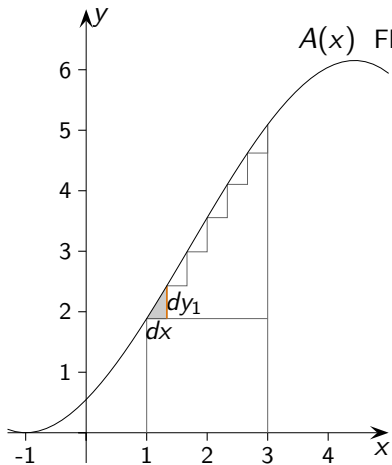


Zum Hauptsatz der Differenzial- und Integralrechnung

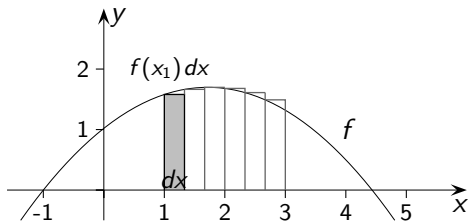
G.Roofls



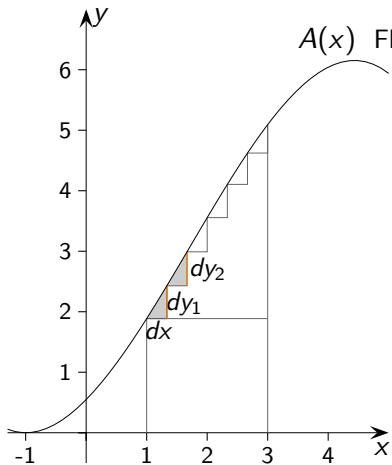


$$A = dy_1$$

$$\frac{dy_1}{dx} = f(x_1)$$

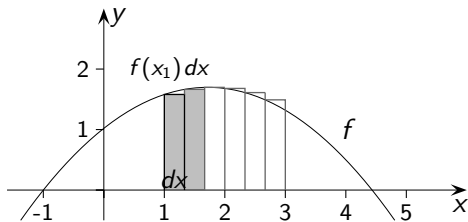


$$A_1 = f(x_1)dx = dy_1$$

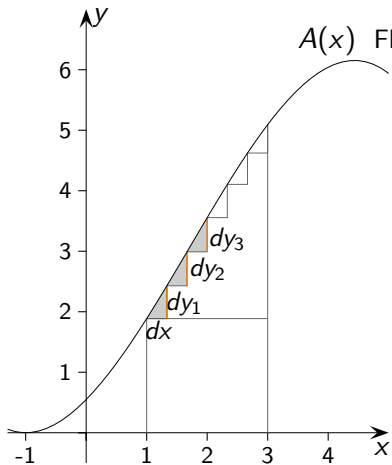


$$A = dy_1 + dy_2$$

$$\frac{dy_2}{dx} = f(x_2)$$

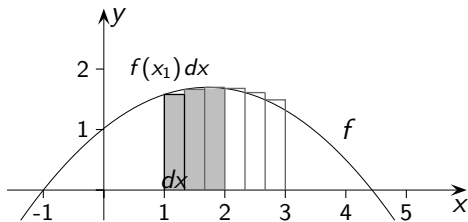


$$A_2 = f(x_2)dx = dy_2$$

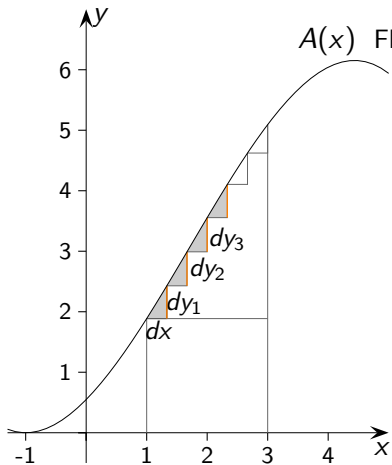


$$A = dy_1 + dy_2 + dy_3$$

$$\frac{dy_3}{dx} = f(x_3)$$

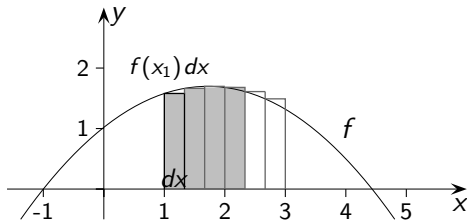


$$A_3 = f(x_3)dx = dy_3$$

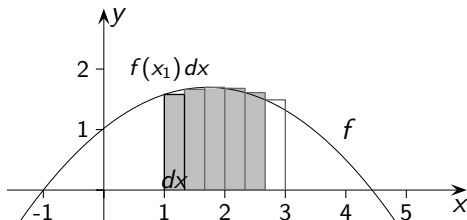
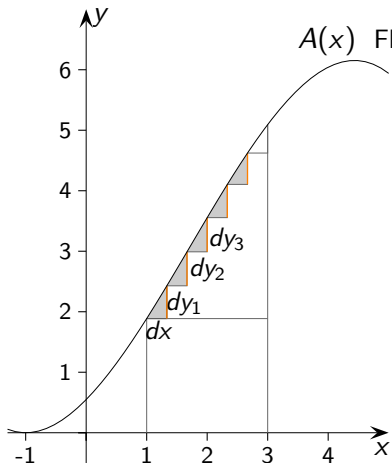


$$A = dy_1 + dy_2 + dy_3 + dy_4$$

$$\frac{dy_4}{dx} = f(x_4)$$



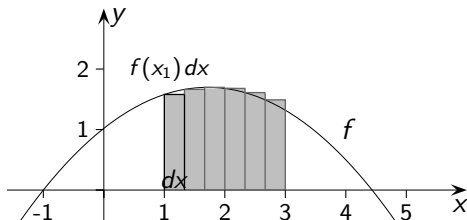
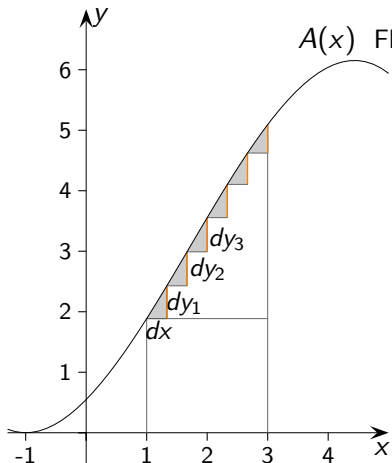
$$A_4 = f(x_4)dx = dy_4$$



$$A = dy_1 + dy_2 + dy_3 + dy_4 + dy_5$$

$$A_5 = f(x_5) dx = dy_5$$

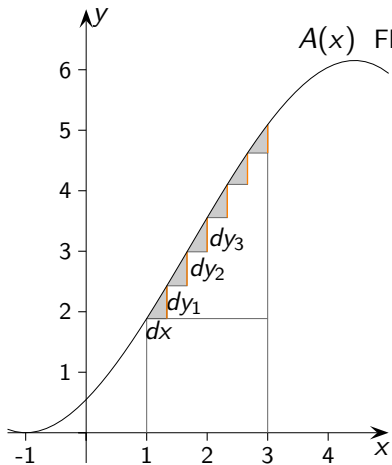
$$\frac{dy_5}{dx} = f(x_5)$$



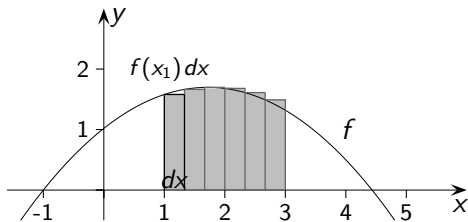
$$A = dy_1 + dy_2 + dy_3 + dy_4 + dy_5 + dy_6$$

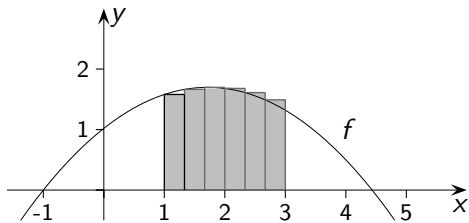
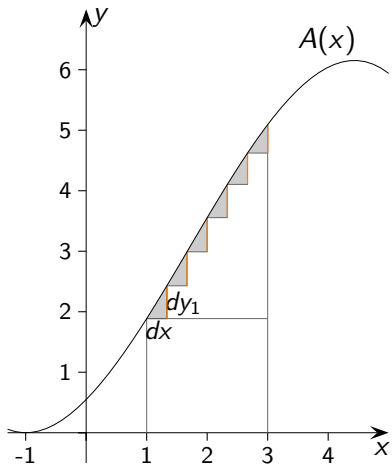
$$A_6 = f(x_6) dx = dy_6$$

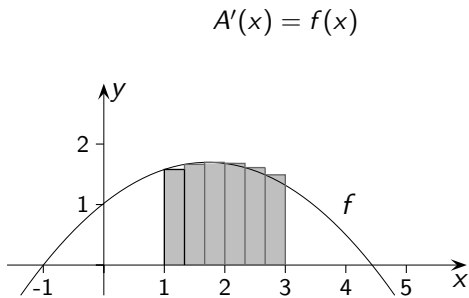
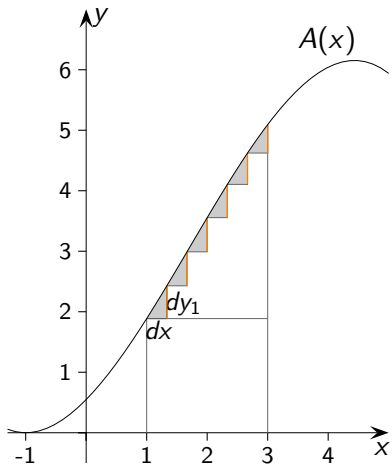
$$\frac{dy_6}{dx} = f(x_6)$$

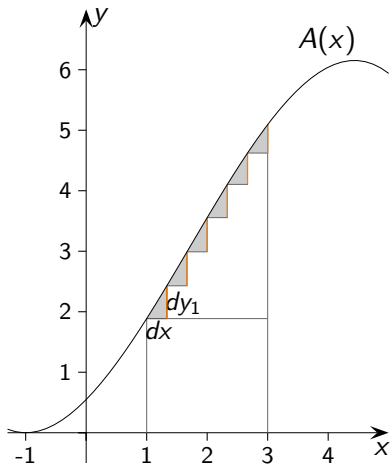


$$\text{Gesamtfläche} = A(3) - A(1)$$

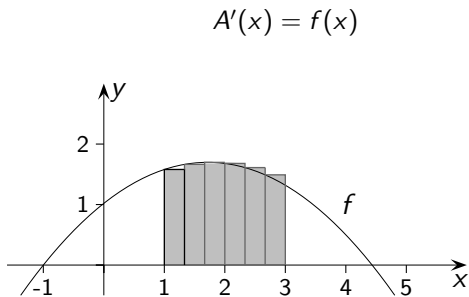


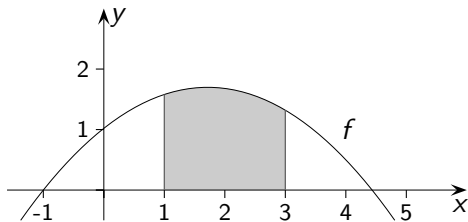
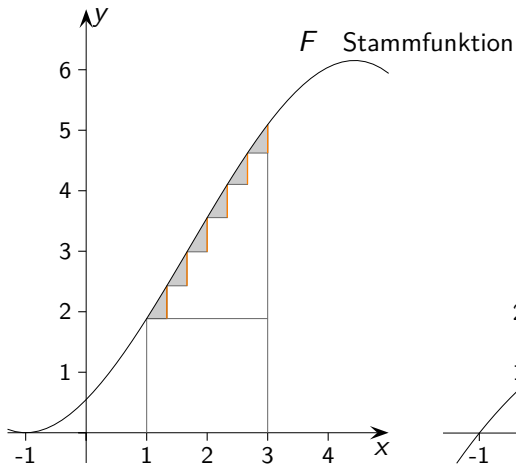


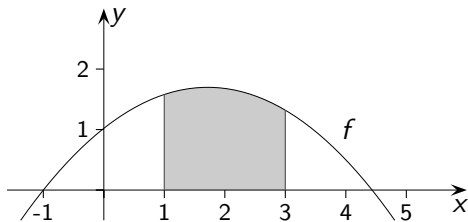
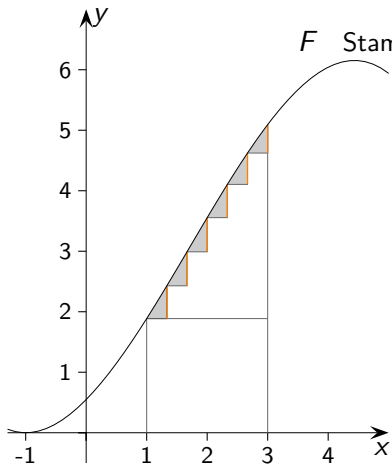




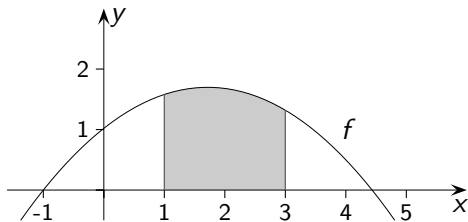
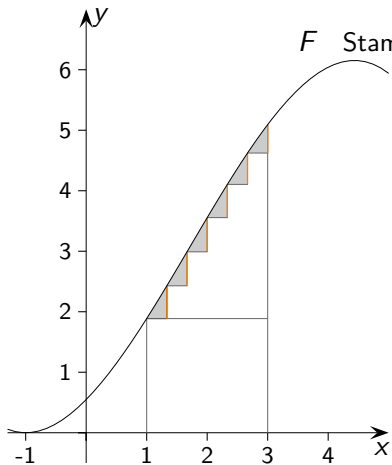
Gesamtfläche = $A(3) - A(1)$



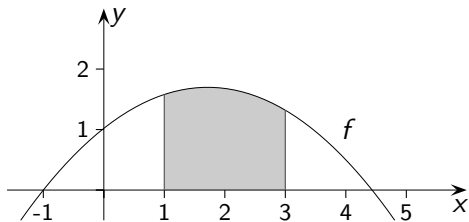
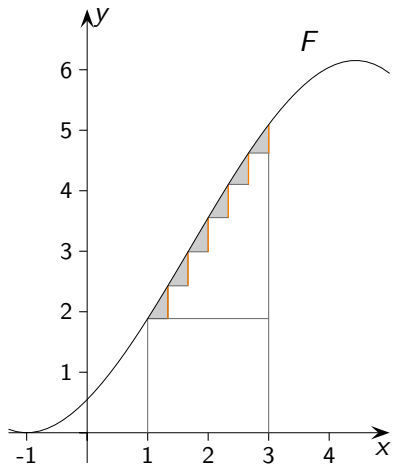




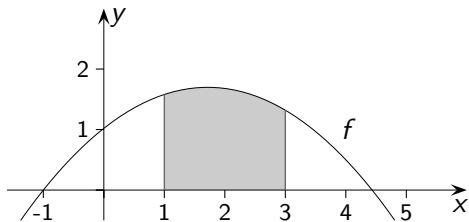
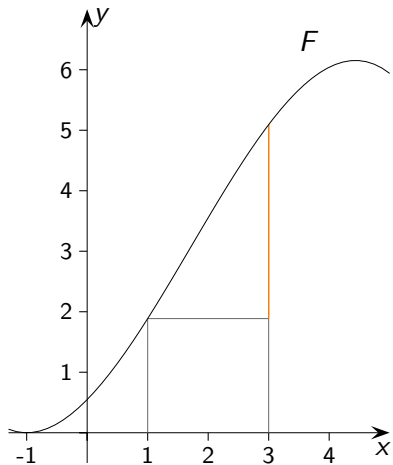
$$A = \int_1^3 f(x) dx =$$



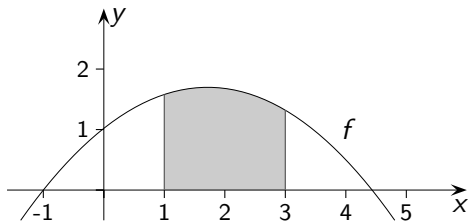
$$A = \int_1^3 f(x) dx = [F(x)]$$



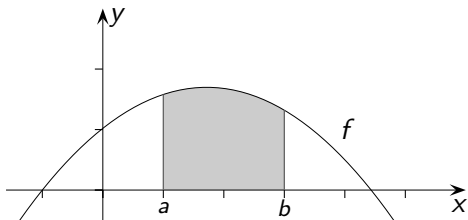
$$A = \int_1^3 f(x) dx = \left[F(x) \right]_1^3 =$$



$$A = \int_1^3 f(x) dx = \left[F(x) \right]_1^3 = F(3) - F(1)$$



$$A = \int_1^3 f(x) dx = \left[F(x) \right]_1^3 = F(3) - F(1)$$



$$A = \int_a^b f(x) dx = \left[F(x) \right]_a^b = F(b) - F(a)$$