

f(x)	Exakter Flächeninhalt A
a) $f(x) = x^3 + x^2$	$0,25 \cdot b^3 \cdot (b + \frac{4}{3})$
b) $f(x) = x^5 + x^3$	$0,1\bar{6} \cdot b^4 \cdot (b^2 + 1,5)$
c) $f(x) = 2x^3 + x$	
d) $f(x) = 5x^2 + 3x$	
e) $f(x) = x^6 + 2x^4$	
f) $f(x) = 6x^3 + 2x^4$	
g) $f(x) = 3x^2 + 4x^3 + 5x^4$	

→

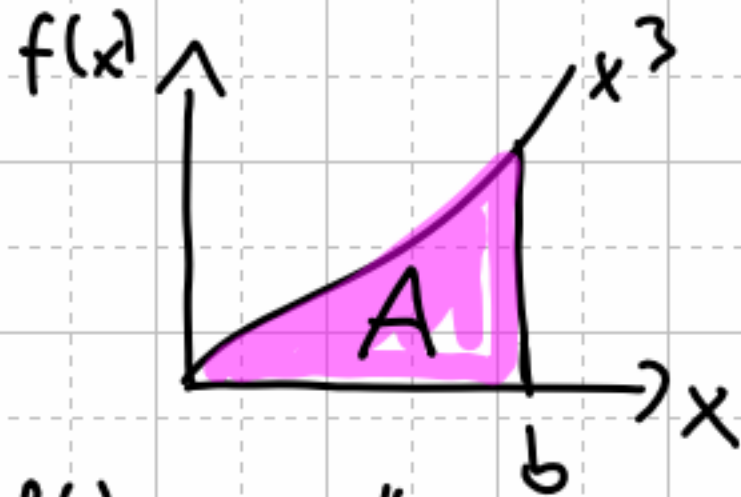
→

$$\begin{array}{l} 6 \overline{) 56} \quad 9 \overline{) 54} \\ 9 \overline{) 54} \quad 4 \overline{) 52} \end{array}$$

$$\sqrt[4]{4} \cdot \sqrt[3]{4}$$

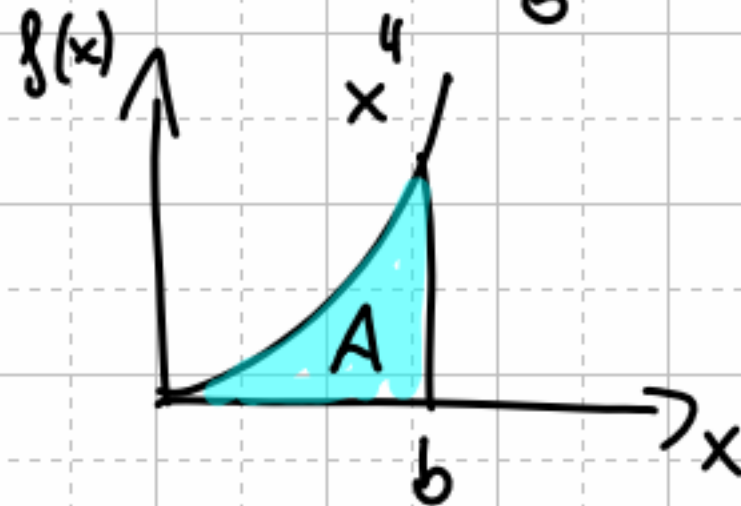
Frage: Wie sieht das bei anderen Funktionen aus?

a) $f(x) = x^3$



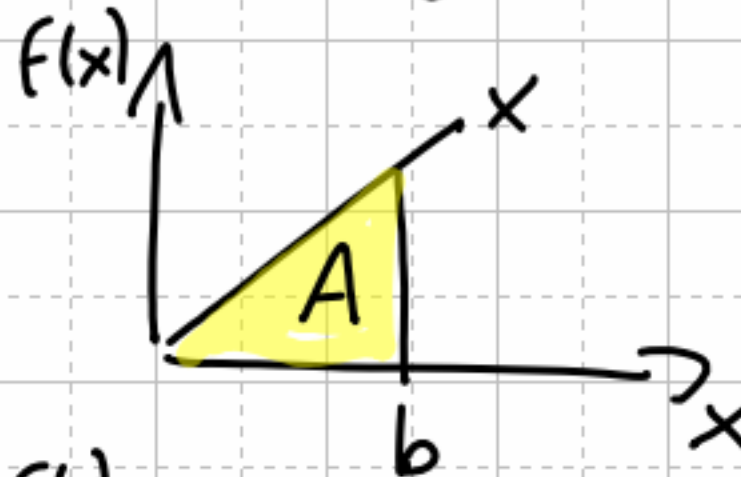
$$A = \frac{b^4}{4}$$

b) $f(x) = x^4$



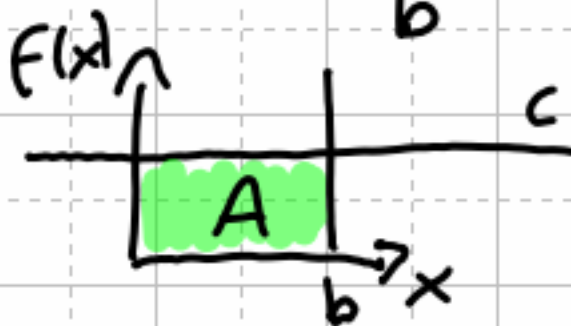
$$A = \frac{b^5}{5}$$

c) $f(x) = x^1$



$$A = \frac{b^2}{2}$$

d) $f(x) = c$



$$A = c \cdot b$$