



Lösung 1

$$\begin{aligned}
 &= (x+h)^3 - x^3 \\
 &= (x+h)^2(x+h) - x^3 \\
 &= (x^2+2xh+h^2)(x+h) - x^3 \\
 &= x^3+2x^2h+h^2x+x^2h+2xh^2+h^3 - x^3 \\
 &= 3x^2h+3xh^2+h^3
 \end{aligned}$$

A absolut

Lösung 2

Lösung 3

$$\begin{aligned}
 &= \frac{3x^2h+3xh^2+h^3}{h} \\
 &= \frac{3x^2+3xh+h^2}{1}
 \end{aligned}$$

A mittel

Lösung 4

$$\lim_{h \rightarrow 0} (3x^2+3xh+h^2) = 3x^2$$

A momentan

Momentane Änderungsrate (2)

