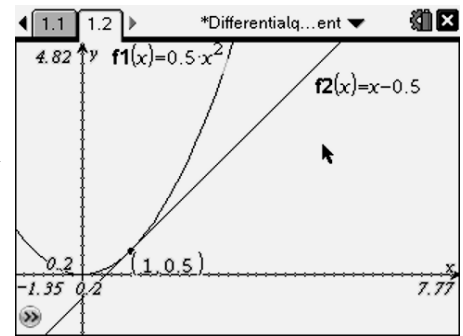
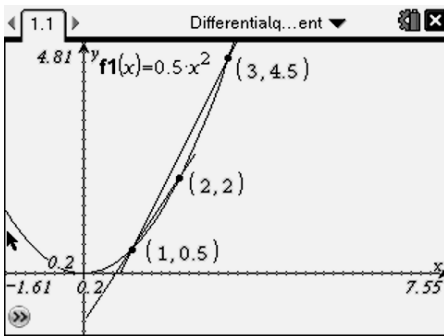


Vom Differenzenquotienten zum Differentialquotienten

Grenzübergang $x \rightarrow x_0$



x	m(x):=	
	$(f_1(x) - f_1(1)) / (x - 1)$	
1.	#UN...	
2.	1.5	
3.	2.	
4.	2.5	
5.	3.	

x	m(x):=	
	$(f_1(x) - f_1(1)) / (x - 1)$	
1.	#UNDEF	
1.1	1.05	
1.2	1.1	
1.3	1.15	
1.4	1.2	
undef		

Sekante



Tangente

Mittlere Änderungsrate



Lokale Änderungsrate

Differenzenquotient



Differentialquotient

$$\frac{f(x) - f(x_0)}{x - x_0}$$



$$m_{x_0} = \lim_{x \rightarrow x_0} \frac{f(x) - f(x_0)}{x - x_0}$$

**Steigung des Graphen
im Punkt $P(x_0 ; f(x_0))$**