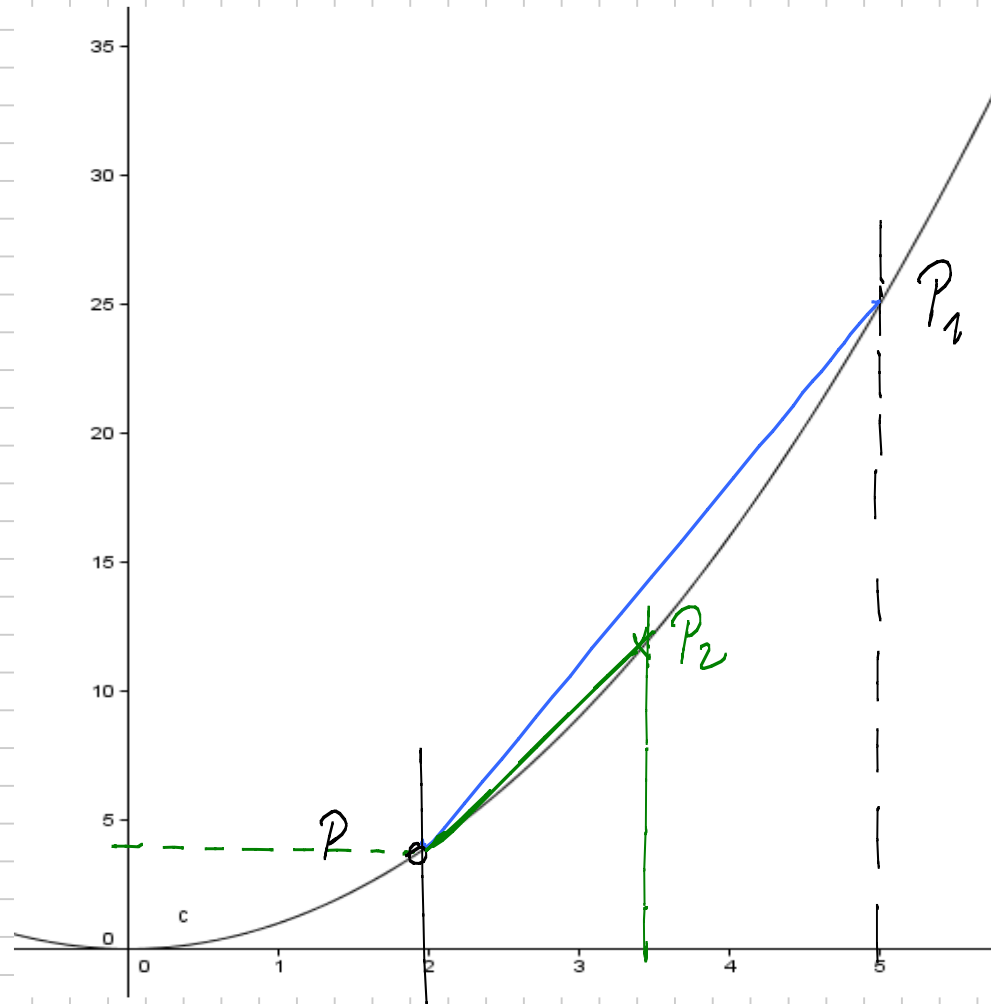


$$y = x^2$$



$P(2|4)$
 $P_2(5|25)$
 $P_2(3,5|12,25)$

Steigung der Sekante zwischen P und P_1

$$m(P, P_1) = \frac{y(P_1) - y(P)}{x(P_1) - x(P)} = \frac{25 - 4}{5 - 2} = 7$$

$$m(P, P_2) = \frac{y(P_2) - y(P)}{x(P_2) - x(P)} = \frac{12,25 - 4}{3,5 - 2} = 6,6$$

Was ist wenn $P \leftrightarrow P_{\infty}$?

$$m = \frac{y(P_{\infty}) - y(P)}{x(P_{\infty}) - x(P)} =$$

$$= \frac{x(P_{\infty})^2 - x(P)^2}{x(P_{\infty}) - x(P)} =$$

$$= \frac{[x(P_{\infty}) + x(P)][x(P_{\infty}) - x(P)]}{x(P_{\infty}) - x(P)} =$$

$$= x(P_{\infty}) + x(P) \quad \text{🚩}$$

$$= 2 + 2 =$$

$$= 4$$