

$$\begin{aligned}(f \cdot g \cdot h \cdot k)' &= [(fgh) \cdot k]' = \\ &= f'gh \cdot k + f \cdot g'h \cdot k + fgh'k + \\ &\quad + fghk'\end{aligned}$$

$$\lim_{h \rightarrow 0} \frac{\sin h}{h} = 1$$

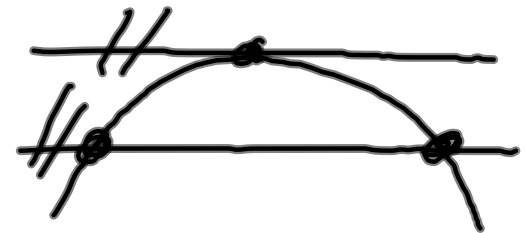
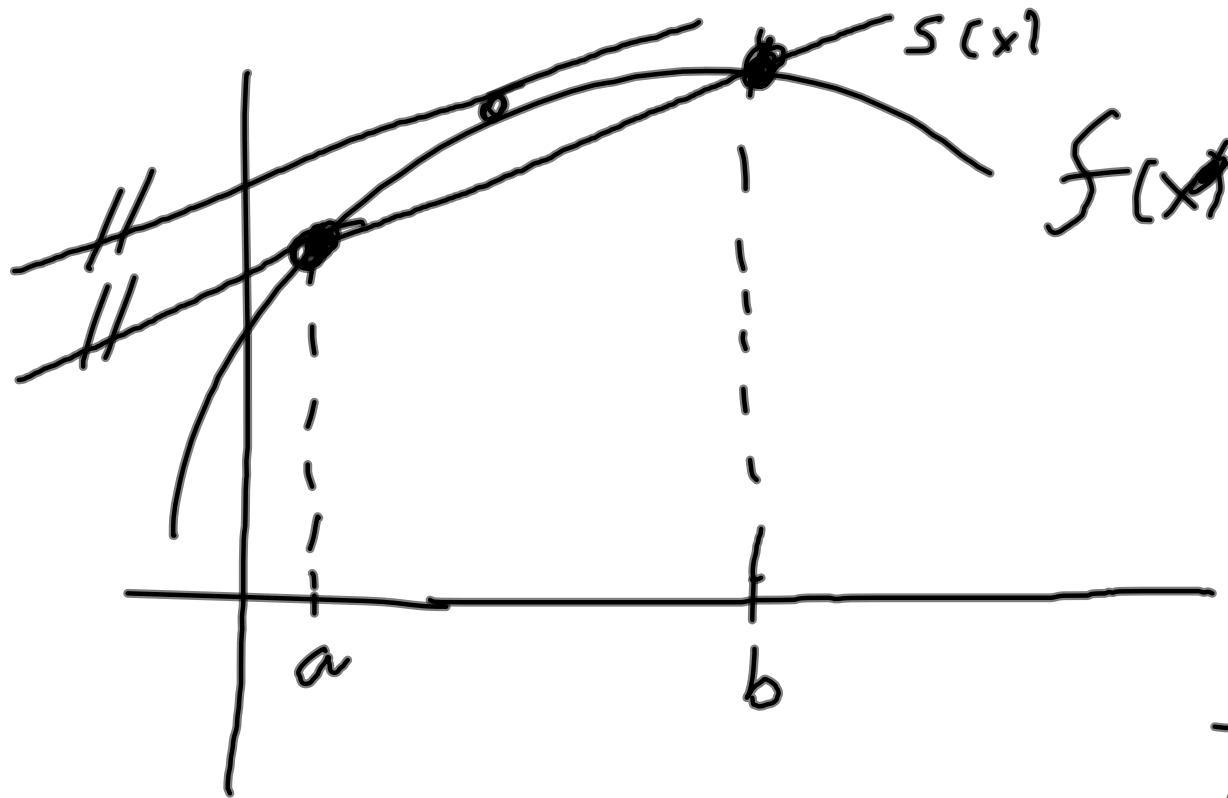
$$\lim_{h \rightarrow 0} \frac{\sin c \cdot h}{h} = \lim_{h \rightarrow 0} \left(\frac{\sin ch}{ch} \cdot c \right) =$$

$$= c \cdot \lim_{h \rightarrow 0} \frac{\sin ch}{ch} = \left| \begin{array}{l} x = ch \\ h \rightarrow 0 \Rightarrow x \rightarrow 0 \end{array} \right| =$$

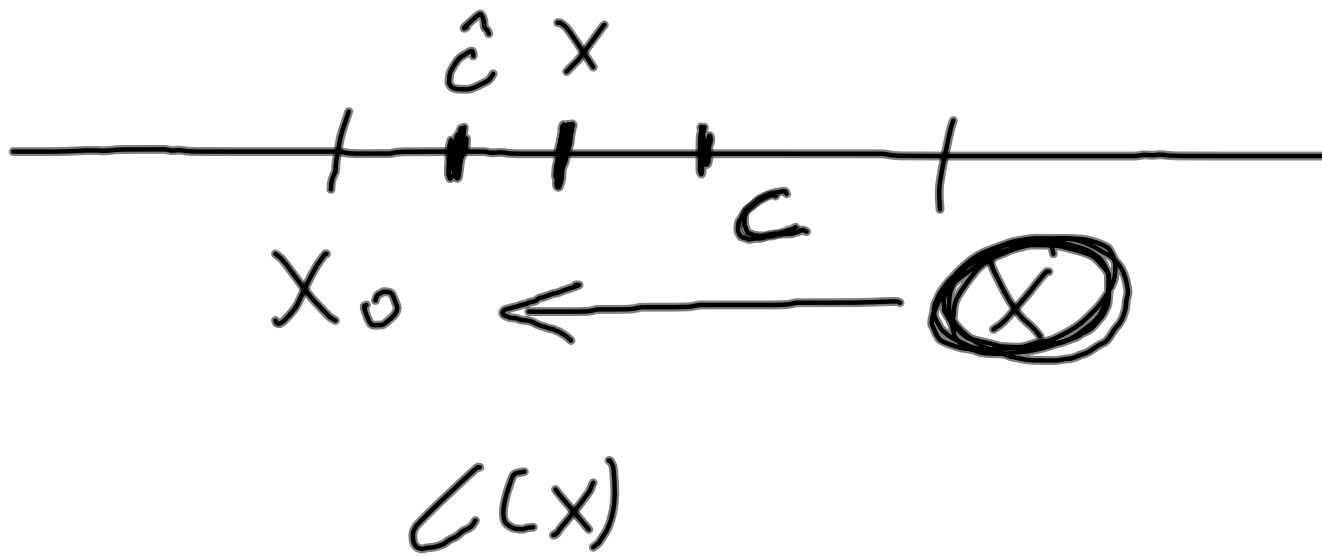
$$= c \cdot \lim_{x \rightarrow 0} \frac{\sin x}{x} = c \cdot 1 = c$$

$$(\cot x)' = \left(\frac{\cos x}{\sin x} \right)' = \frac{(\cos x)' \sin x - \cos x (\sin x)'}{\sin^2 x}$$

$$= \frac{-\sin^2 x - \cos^2 x}{\sin^2 x} = \underline{\underline{\underline{\frac{-1}{\sin^2 x}}}}$$



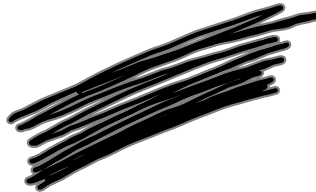
$$f(x) - s(x) \Big|_{\substack{x=a \\ x=b}} = 0$$

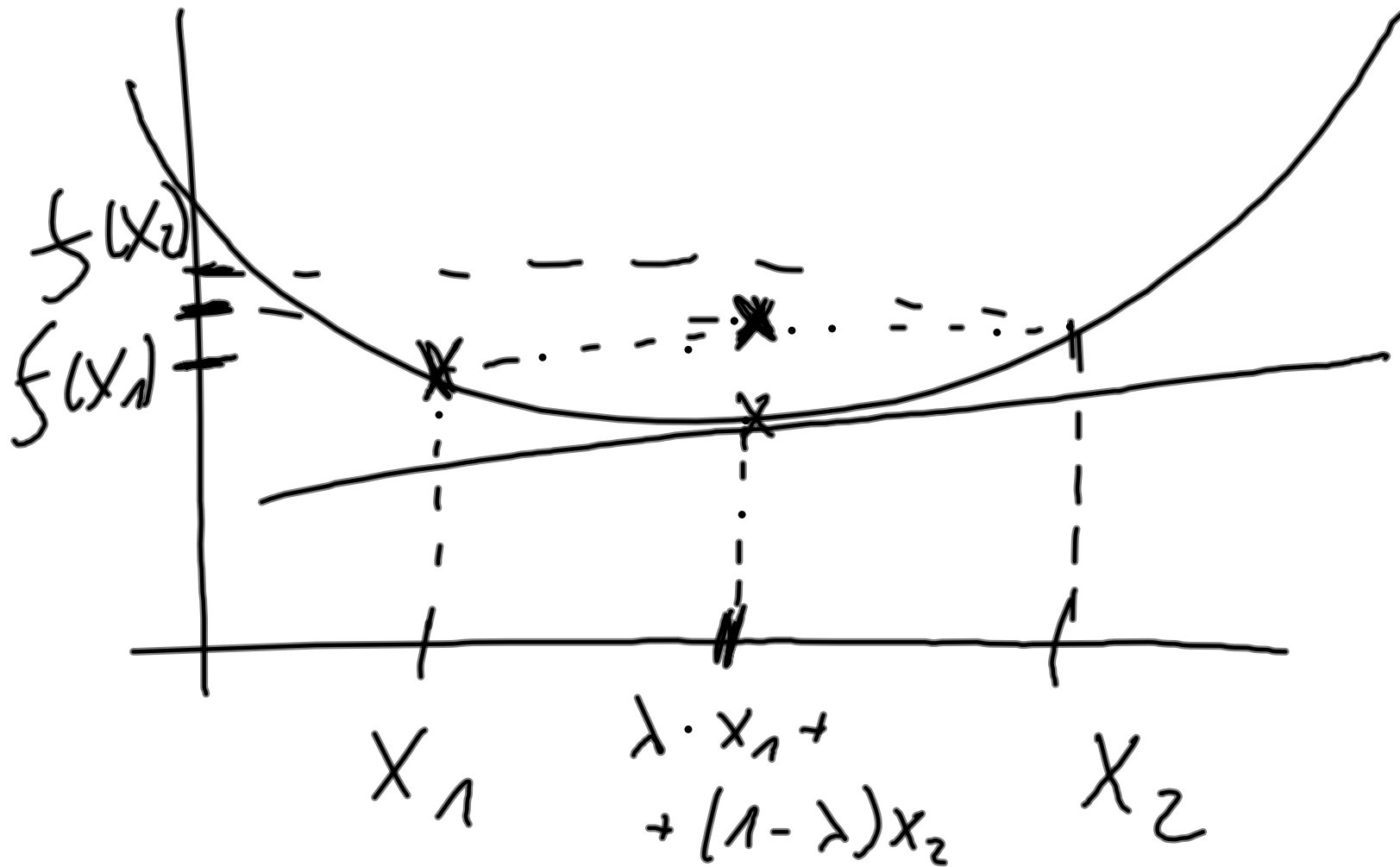


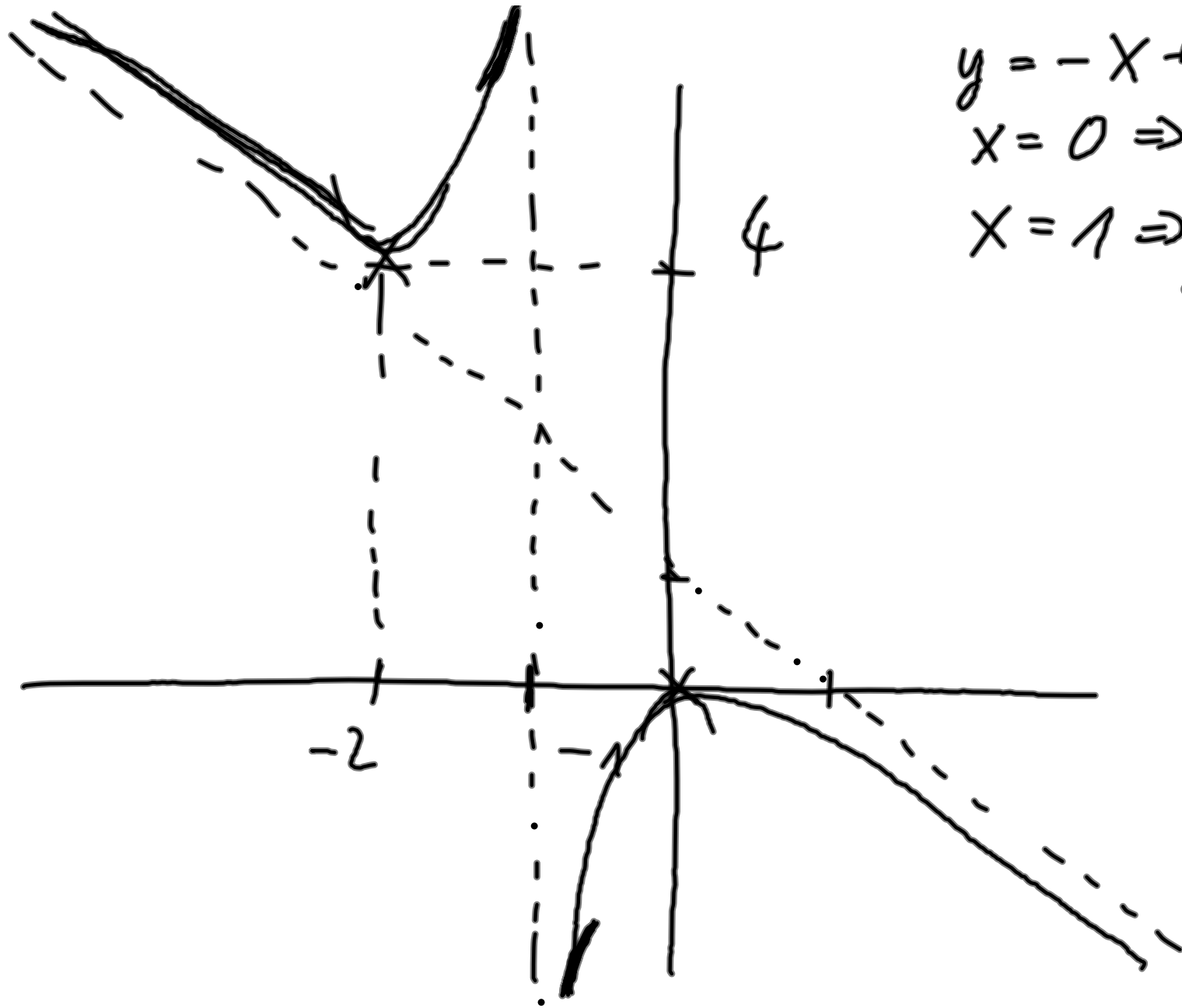
$$\frac{f}{g} = \left| \frac{0}{0} \right| = \dots$$

$$\frac{\left(\frac{1}{g} \right)}{\left(\frac{1}{f} \right)} = \left| \frac{8}{8} \right| = \dots$$

$$\lim_{x \rightarrow 0} \frac{\sin x}{x} = \left| \frac{0}{0} \right| =$$

$$= \lim_{x \rightarrow 0} \frac{\cos x}{1} = 1$$






$$y = -x + 1$$
$$x = 0 \Rightarrow y = 1$$
$$x = 1 \Rightarrow y = 0$$