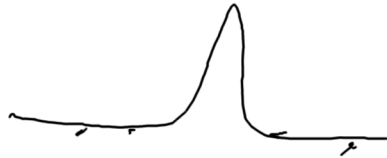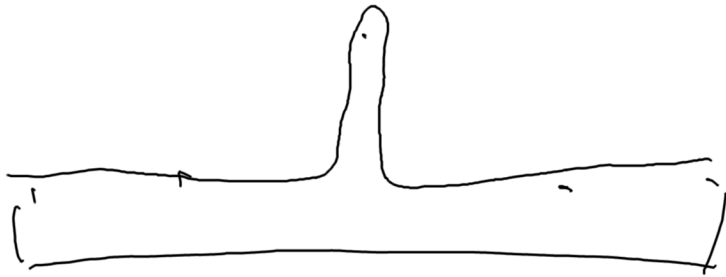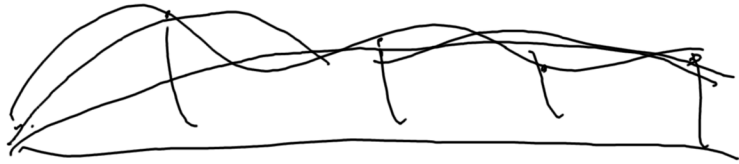actual region
relevant

supp ≠ Taylor
land

How can we break adaptive step sizes?

$$\int_a^b f(x)\,dx$$

$$u = \frac{1}{x} \qquad du = -\frac{1}{x^2}\,dx$$

$$= -u^2\,dx$$

$$dx = -\frac{du}{u^2}$$

$$= -\int_{1/b}^{1/a} \frac{1}{u^2} f\left(\frac{1}{u}\right)\,du$$

$$u = 1/a$$

$$= \int_{1/b}^{1/a} \frac{f\left(\frac{1}{u}\right)\,du}{u^2}$$