

Ex 3.26: simply put all rectangles between balls and vice versa.

Thm 3.27

Wednesday!

$X_1 \times \dots \times X_n$: product space.

$$f_i = \pi_i \circ f$$

$$f: Y \rightarrow$$

$\pi_i: X_1 \times \dots \times X_n \rightarrow X_i$ is the canonical projection.

Thm 3.27 Alt proof & Ex 3.29

~~Claim~~ π_i is cts as $\pi_i^{-1}(U) = X_1 \times \dots \times U \times \dots \times X_n$ is open!

$\Rightarrow \pi_i \circ f$ is cts if f is cts.

$$\text{first } f_i(z) = \pi_i(f(z))$$
$$f_i^{-1} = f^{-1} \circ \pi_i^{-1}$$

Prop 3.36 (does map if you think of the forms!)

~~Thm 3.37~~