## Homework $\pi$ Selected Solutions

September 2, 2020

§1.6: 15. Define a map  $\pi: \mathbb{R}^2 \to \mathbb{R}$  by  $\pi((x,y)) = x$ . Prove that  $\pi$  is a homomorphism and find the kernel of  $\pi$ .

Proof. (Allman)

The crucial ingredients for your LATEX contributions to the class solutions are: 1) the problem number from the textbook, 2) your name to give attribution, 3) a correct proof, 4) a file name that follows the pattern problem number(s) and last name:

## 1.6.15 $\_LASTNAME.tex$

and 5) no additional macros or packages or gunk.

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