Math 220 − Homework 10

Attempt these problems before Exam 2

<div align="center">Total points=0</div>

PART A

Problems from the textbook:

Section 3.3 # 10(b,c,d), 12, 14, 15, 16

PART B

1. The functions $f, g \in F(\mathbf{R})$ defined by $f(x) = 2x + 1$ and $g(x) = 3x - 5$ are bijective. Determine the inverse function of $g \circ f^{-1}$.

2. Let $a, b \in \mathbb{R} - \{0\}$ and let functions $f, g \in F(\mathbf{R})$ be defined by

$$f(x) = ax + b, \quad g(x) = x + \frac{b}{a}.$$

Compute the *inverse* function of $g \circ f^{-1}$.