

MATH 3P12, Fall, 2017

ASSIGNMENT #2

Due Friday, Oct. 20, 2017

1. Let \mathcal{R} be the set of all real numbers under the operation $*$ given by : $a * b = a + b + 5$.
 - (a) Show that $(\mathcal{R}, *)$ is a group.
 - (b) Is this an Abelian group?
 - (c) What is the subgroup generated by 2?

2. The following questions are from the text book (with 9th edition).

Pages 68–74. #1 (do the part regarding to $\mathcal{Z}_{12}, U(20), D_4$ only), 4, 7, 19, 34, 36, 44.

Pages 85–90. # 4, 8(a), (c), 9, 21, 36, 38.

Additional Practice Exercises. Not To Be Submitted.

Pages 68–74. # 6, 12, 15, 18, 24, 27, 28, 33, 46, 52.

Pages 85–90 # 10, 12, 14, 22, 24, 26, 29, 32, 42, 70.