

MATH 3P12, Fall, 2017

ASSIGNMENT #4

Due 5 pm. Friday, Dec. 1, 2017

1. Without doing any calculation in $\text{Aut}(Z_{20})$, determine how many elements of $\text{Aut}(Z_{20})$ have order 4? How many have order 2? (Hint $\text{Aut}(Z_{20}) \cong U(20)$).

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

Pages 167–171. # 4, 6, 10, 14, 22, 26.
Pages 187–192 # 7, 9, 17, 25, 28, 30, 34.

Additional Practice Exercises. Not To Be Submitted.

Pages 167–171. # 1, 3, 8, 9, 11, 15, 17, 19, 28, 32, 37, 38, 39, 41, 46, 65, 66
Page 187–192 # 2, 3, 4, 6, 10, 11, 12, 13, 14, 18, 19, 21, 24, 27, 29