

Only hand in the starred questions!

Chapter 14, page 150: 2\*, 3\*, 4\*, 6\*, 7\*

Extra question:

- B\* Consider the class function defined on  $A_4$  which takes the value 9 on the identity, 1 on the elements of order 2, and 0 on the elements of order 3. Express this function as a linear combination of characters of  $A_4$ , and show that it is in fact a character.