

HW #6, due 2-14

Math 505A

1. (20 points) Exercise 17.2.10, p. 811.
2. Exercise 17.2.11.
3. Exercise 17.2.19.
4. Let A be the algebra over \mathbb{Q} generated by two elements x, y such that $x^2 = -3, y^2 = -7, xy = -yx$. Show that A is a division ring, by imitating the proof that the ring H of quaternions is a division ring.

Finish Chapter 17.