Chapter 14

1.) Let $a \in R$. We know that $\langle a \rangle \subseteq R$ and that it is non-empty. In addition, since R is commutative, we have $ra = ar$, thus $ra \in \langle a \rangle \iff ar \in \langle a \rangle$, thus $\langle a \rangle$ is an ideal of R.

7.) Let $a \in R$. We know that $aR \subseteq R$, and that it is non-empty. In addition, since R is commutative, we have $ra = ar$,

28.) awd

Chapter 15

5.) awd

20.) awd