Suggested Readings (textbook): Chapters 7-8.
Suggested Problems (textbook):
Ch. 7: 7.2.17 7.3.1 7.3.2 7.3.8 7.3.11 7.5.5 7.5.7 7.6.10
Ch. 8:

Problems to hand in for grading (textbook)
Ch. 7: 7.3.10 7.5.6 7.6.14
Ch. 8:

Note: For 7.3.10; think before you do anything. It's quite easy if you go at it the right way, else ... think of the component of $\dot{\text{vect}\{x\}}$ in the radial direction for large $r$.

Note: 7.5.5 may sound confusing at first; but it can be done using exactly the same set of tricks that work for van de Pol equation.