Additional HW problems for Chapter 5 for graduate students.

Required for graduate students, other students may attempt it but no credit will be given. Turn in separately from the textbook assignment.

Do problems 5-9 from Chapter 5 (p. 51); but instead of using graphical analysis, provide exact proofs based on Taylor's formula/Taylor Series expansion. Also, mention specifically what happens to the orbits in problems 5 and 6.