Katee Sackhoff starbuck@basestar.caltech.edu ACM11 Homework 1

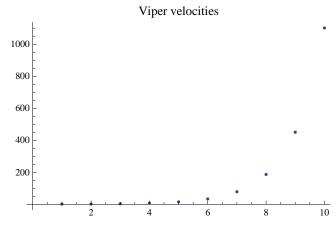
This file is an example of how we expect your Mathematica homeworks to be laid out (with the exception of this explanatory cell here). Use the Title format for the header cell, the Section format for the each problem header, the Subsection format for the portions of each problem, and the Text format for any explanatory text needed. For an explanation of how to manipulate cell formats, see the Help menu -> Virtual Book -> Notebooks and Documents -> Notebook Interface -> Working with Cells.

If you have any comments for the instructor or grader pertaining to your homework, you may leave them here

Problem 1

Part a

```
(* this is how you write a comment in Mathematica *)
(* use comments to make your calculations clear *)
(* if you perform calculations whose outputs we don't need to see,
or didn't ask to see, use a semicolon so they are not displayed *)
d = (Pegasus - BSG) noonecares;
A = Table \begin{bmatrix} 1 \\ -Sinh[n], \{n, 1, 10\} \end{bmatrix};
(* this is how you label plots;
PlotLabel also works for other plot types; label all your plots,
and check that Mathematica isn't truncating your plots, as we discussed in class *)
ListPlot[A, PlotLabel \rightarrow "Viper velocities", PlotRange \rightarrow All]
(*Unless we specify otherwise, when you turn in your work,
all the input cells should have been evaluated,
so we can look at the output without having to run your notebook. *)
(* To be absolutely certain that you didn't mess anything up
 (refer to undefined variables, etc.), kill the kernel from the Evaluation menu,
then use the Evaluate Notebook option in the same menu to run the notebook
 from top to bottom; if the outputs are correct and you have no errors,
then you can safely turn in your notebook *)
```



If the question asks for a yes or no answer, or comments or explanations, use a cell in the text format to answer it

Part b

(* same layout as above *)

Problem 2

Same layout as above