

Section number:

Name of recitation instructor:

Names of team members:

Exercise 1 BRIEFLY answer the questions below (see the Lab Document for more details).

Why do we expect $R(X)$ to be a decreasing function?

Why should $R(X)$ always be non-negative?

Why is the solution to $R(X) = 1$ the market equilibrium?

Exercise 2 Compute the *percent changes* from $X(0)$ to $X(1)$ with the given values of $X(0)$ and volatility v . Record your answer in the table below. You may round to the nearest percent.

	$v = 0.5$	$v = 1$	$v = 2$
$X(0) = 0.4$	%	%	%
$X(0) = 2$	%	%	%

Exercise 3 When $v < 1$, does the convergence toward market equilibrium happen faster for less volatile markets or more volatile ones? Give an intuitive explanation.

Exercise 4 When $1 < v < 2$, does the convergence toward market equilibrium happen faster for less volatile markets or more volatile ones? Give an intuitive explanation.

Exercise 5 What do you notice that is different qualitatively between the $v = 2.8$ case versus the other three cases? What does this say about attempts to forecast stock prices, in a volatile market, based on incomplete information?