First Portfolio Problem

Write a complete paragraph-style proof of the following theorem. Be sure to follow all of the guidelines described in the handouts titled *Homework Presentation Guidelines* and *Some Remarks on Writing Mathematical Proofs*. Your first draft will be graded mainly for mathematical correctness; later you will hand in second and third drafts, which will be graded also on presentation.

Theorem: *Suppose a is a nonzero real number. There exists a real number x that solves the equation*

$$x - 2 = \frac{x}{a}$$

if and only if $a \neq 1$.