Applications of Linear Systems of Equations

MATH 101 *College Algebra*

J Robert Buchanan

Department of Mathematics

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Objectives

In this lesson we will learn to solve applied problems using systems of two linear equations in two variables.

Mixture

A pharmacist has two solutions of alcohol. One is 25% alcohol and the other is 45% alcohol. He wants to mix these two solutions to obtain 36 ounces of a 30% alcohol solution. How many ounces of each solution should be mixed together?

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Solution: $x = 27$, $y = 9$.