

TAKS Objective 4
TEK A.8A
Tutorial
(Grades 9, 10, and 11)

...analyze situations and formulate systems of linear equations in two unknowns to solve problems.

Bill worked 14 hours last week and earned \$96. His first job pays \$8 an hour and his second job pays \$6 an hour. Write a system of equations for this scenario.

$$F + S = 14$$

$$8F + 6S = 96$$

The local cop issued a total of 375 citations for warnings and speeding tickets. There were 37 more warnings than speeding tickets. Write a system of equations for this scenario.

$$W + S = 375$$

$$W = S + 37$$

A retailer sells mixes of peanuts and almonds. The retailer charges \$2.80 per pound for peanuts and \$5.30 for almonds.

The retailer wants to sell 100 pounds of the mix for \$3.30 a pound. Write a system of equations for this scenario.

$$P + A = 100$$

$$2.80P + 5.30A = 3.30(100)$$