Math 120 Intermediate Algebra
Solving Applications: Systems of Two Equations

Ex 1 (# 22) Oh Nuts! sells pistachio kernels for $6.50 per pound and almonds for $8.00 per pound. How much of each type should be used to make a 50-lb mixture that sells for $7.40 per pound? 20 lb. pistachio kernels; 30 lb. almonds

Ex 2 (# 30) A self-employed contractor nearing retirement made two investments totaling $15,000. In one year, these investments yielded $1023 in simple interest. Part of the money was invested at 6% and the rest at 7.5%. How much was invested at each rate? $6800 @6%; $8200 @7.5%

Ex 3 (# 40) Cody’s motorboat took 3 hours to make a trip downstream with a 6-mph current. The return trip against the same current took 5 hours. Find the speed of the boat in still water. 24 mph

Ex 4 (# 50) Sabina goes to a bank and gets change for a $50 bill consisting of all $5 bills and $1 bills. There are 22 bills in all. How many of each kind are there? 7 $5 bills; 15 $1 bills