

You are going to invest \$10,000 in AAA-rated bonds, AA-rated bonds, and B-rated bonds and want an annual return of \$730. The average yields are 6% on AAA bonds, 7.5% on AA bonds, and 9.5% on B bonds. You will invest twice as much in AAA bonds as in B bonds. Your investment can be represented as

$$x + y + z = 10,000$$

$$0.06x + 0.075y + 0.095z = 730$$

$$x - 2z = 0$$

Where  $x$ ,  $y$ , and  $z$  represent the amounts invested in AAA, AA, and B bonds, respectively. Solve the system of equations.