

NAME: _____

P.I. A.A.7: Analyze and solve verbal problems whose solution requires solving systems of linear equations in two variables

1. Kendra owns a restaurant. She decides to charge \$1.50 for 2 eggs and one piece of toast and \$0.90 for one egg and one piece of toast. How much is she charging for each egg and each piece of toast?
2. The local library had a sale to get rid of books that were slightly damaged. It sold paperback books for \$2.00 and hard-cover books for \$5.00. The library raised \$271 and sold 89 books. How many hard-cover books were sold?
[A] 31 [B] 70 [C] 58 [D] 155
3. Sara has \$2.10 in nickels and dimes. She has three times as many dimes as nickels. How many nickels and how many dimes does she have?
4. Play tickets for two adults and two children cost \$24. A child's ticket costs half as much as an adult's ticket. Find the cost of a child's ticket.
5. Use any problem solving strategy to solve the following problem. Kyle earned 4 times as much as Ken last summer. If they earned a total of \$750, how much did they each earn?
6. Tom has a collection of 50 CDs and Nita has a collection of 38 CDs. Tom is adding 2 CDs a month to his collection while Nita is adding 4 CDs a month to her collection. In how many months will they have the same number of CDs?
7. From 1980 to 1990, the population of Mesa, Arizona grew about 13,500 people each year to a population of about 290,000. During that same time period, the population of Tucson, Arizona grew at about 7,500 people a year to a population of about 405,000. Suppose the populations of both cities continue to grow at these rates. In what year will they have the same populations?

\$0.60 for each egg and \$0.30 for each piece of
[1] toast _____

[2] A _____

[3] 6 nickels and 18 dimes _____

[4] \$4 _____

[5] Kyle earned \$600 and Ken earned \$150. _____

[6] in 6 months _____

[7] about 2010 _____