

- 5) The school that Matt goes to is selling tickets to a fall musical. On the first day of ticket sales the school sold 14 senior citizen tickets and 5 student tickets for a total of \$181. The school took in \$137 on the second day by selling 3 senior citizen tickets and 10 student tickets. What is the price each of one senior citizen ticket and one student ticket?
- 6) Amy and Matt are selling pies for a school fundraiser. Customers can buy cherry pies and lemon meringue pies. Amy sold 9 cherry pies and 9 lemon meringue pies for a total of \$315. Matt sold 3 cherry pies and 5 lemon meringue pies for a total of \$141. What is the cost each of one cherry pie and one lemon meringue pie?
- 7) Jack left the mall and traveled toward the desert at an average speed of 40 km/h. Ndiba left two hours later and traveled in the same direction but with an average speed of 60 km/h. How long did Jack travel before Ndiba caught up?

Linear Systems Practice Quiz #2

Date _____ Period _____

1) Find the value of two numbers if their sum is 145 and their difference is 33.

56 and 89

2) The difference of two numbers is 5. Their sum is 139. What are the numbers?

67 and 72

3) A metallurgist needs to make 12 kg of an alloy containing 65% iron. She is going to melt and combine one metal that is 70% iron with another metal that is 40% iron. How much of each should she use?

10 kg of 70% iron, 2 kg of 40% iron

4) Eduardo wants to make 11 fl. oz. of a 70% sugar solution by mixing together a 42% sugar solution and a 86% sugar solution. How much of each solution must he use?

4 fl. oz. of 42% solution, 7 fl. oz. of 86% solution

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senior citizen ticket: \$9, student ticket: \$11

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cherry pie: \$17, lemon meringue pie: \$18

- 7) Jack left the mall and traveled toward the desert at an average speed of 40 km/h. Ndiba left two hours later and traveled in the same direction but with an average speed of 60 km/h. How long did Jack travel before Ndiba caught up?

6 hours