More Systems of Equations – Day 3
Purchases, Printing Press, and Current Travel
Unit 5: Real World Applications

Solve each question. Round your answer to the nearest hundredth when needed.

1. Natalie spent $30 on shirts. Tee shirts cost $9 and long sleeve shirts cost $4. If she bought a total of 5, then how many of each kind did she buy?

2. Jenny bought 10 shirts for a total of $180. Fancy shirts cost $23 and plain shirts cost $13. How many of each type of shirt did she buy?

3. Leah bought 7 shirts for a total of $66. Tee shirts cost $8 and long sleeve shirts cost $13. How many of each type of shirt did she buy?

4. Molly bought 9 eating utensils for a total of $30. Spoons cost $4 and forks cost $2. How many of each eating utensil did she buy?

5. Michelle's Printing Inc. has two types of printing presses: Model A and Model B. Model A can print 70 books per day and Model B can print 60 books per day. Altogether Michelle has 8 printing presses. If she can print 500 books in a day, then how many of each press does she have?

6. Aliyah's Printing Inc. has two types of printing presses: Model A and Model B. Model A can print 70 books per day and Model B can print 65 books per day. Altogether Aliyah has 20 printing presses. If she can print 1350 books in a day, then how many of each press does she have?

7. At Maya's Printing Company LLC there are two kinds of printing presses: Model A which can print 70 books per day and Model B which can print 45 books per day. The company owns 7 total printing presses and this allows them to print 415 books per day. How many of each type of press do they have?

8. At David's Printing Company LLC there are two kinds of printing presses: Model A which can print 40 books per day and Model B which can print 70 books per day. The company owns 9 total printing presses and this allows them to print 420 books per day. How many of each type of press do they have?

9. Flying to Tokyo with a tailwind a plane averaged 145 km/h. On the return trip the plane only average 83 km/h while flying back into the same wind. Find the speed of the plane in still air and the speed of the wind.

10. Going down the river a boat went 18 km/h. Going up the river it only went 6 km/h. What is the speed of the current? How fast would the boat go if there were no current?

11. Flying with the wind a plane went 132 mph. Flying into the same wind the plane only went 64 mph. Find the speed of the plane in still air and the speed of the wind.

12. Flying to Singapore with a tailwind a plane averaged 421 mph. On the return trip the plane only averaged 349 mph while flying back into the same wind. Find the speed of the plane in still air and the speed of the wind.

13. A boat traveled 240 miles each way downstream and back. The trip downstream took 12 hours. The trip back took 60 hours. Find the speed of the boat in still water and the speed of the current.

14. A plane traveled 2112 miles each way to Phoenix and back. The trip there was with the wind. It took 11 hours. The trip back was into the wind. The trip back took 16 hours. What is the speed of the plane in still air? What is the speed of the wind?

15. A boat traveled 210 kilometers each way downstream and back. The trip downstream took 10 hours. The trip back took 210 hours. What is the speed of the boat in still water? What is the speed of the current?

16. A boat traveled 240 kilometers each way downstream and back. The trip downstream took 12 hours. The trip back took 15 hours. What is the speed of the boat in still water? What is the speed of the current?