More Systems of Equations – Day 2 Purchases, Printing Press, and Current Travel

Unit 5: Real World Applications

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

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1. Jasmine spent \$226 on books. Math books cost \$22 and English books cost \$29. If she bought a total of 9, then how many of each kind did she buy?
2. Aliyah bought 11 writing utensils for a total of \$39. Pens cost \$4 and pencils cost \$3. How many of each writing utensil did she buy?
3. Kathryn bought 5 eating utensils for a total of \$12. Spoons cost \$2 and forks cost \$3. How many of each eating utensil did she buy?
4. Ryan spent \$38 on shirts. Tee shirts cost \$7 and long sleeve shirts cost \$5. If he bought a total of 6, then how many of each kind did he buy?
5. At Eduardo's Printing Company LLC there are two kinds of printing presses: Model A which can print 50 books per day and Model B which can print 55 books per day. The company owns 5 total printing presses and this allows them to print 260 books per day. How many of each type of press do they have?
6. At William's Printing Company LLC there are two kinds of printing presses: Model A which can print 80 books per day and Model B which can print 35 books per day. The company owns 6 total printing presses and this allows them to print 345 books per day. How many of each type of press do they have?
7. James' Printing Inc. has two types of printing presses: model A and Model B. Model A can print 50 books per day and Model B can print 40 books per day. Altogether James has 11 printing presses. If he can print 470 books in a day, then how many of each press does he have?
8. At Perry's Printing Company LLC there are two kinds of printing presses: Model A which can print 50 books per day and Model B which can print 45 books per day. The company owns 8 total printing presses and this allows them to print 385 books per day. How many of each type of press do they have?

9. Going down the river a boat went 20 km/h. Going up the river it only went 8 km/h. Find the speed of the boat in still water and the speed of the current.
10. Flying with the wind a plane went 140 km/h. Flying into the same wind the plane only went 66 km/h. What is the speed of the wind? How fast would the plane go if there were no wind?
11. Traveling downstream a certain boat went 16 km/h. Traveling upstream it only went 4 km/h. Find the speed of the boat in still water and the speed of the current.
12. Traveling with the current a certain boat went 17 km/h. Against the same current it only went 9 km/h. Find the speed of the boat in still water and the speed of the current.
13. A boat traveled 180 miles each way downstream and back. The trip downstream took 6 hours. The trip back took 9 hours. What is the speed of the boat in still water? What is the speed of the current?
14. A boat traveled 150 miles each way downstream and back. The trip downstream took 6 hours. The trip back took 30 hours. Find the speed of the boat in still water and the speed of the current.
15. A plane traveled 2160 kilometers each way to Houston and back. The trip there was with the wind. It took 12 hours. The trip back was into the wind. The trip back took 15 hours. Find the speed of the plane in still air and the speed of the wind.
16. A plane traveled 936 miles each way to Las Vegas and back. The trip there was with the wind. It took 13 hours. The trip back was into the wind. The trip back took 18 hours. What is the speed of the plane in still air? What is the speed of the wind?