

First Name: _____
Last Name: _____
Grade: _____
Teacher: _____







The holiday season shopping is here! Let's help Liya shop by solving this math challenge. Your solutions to this challenge are due on **Thursday, December 15 (no later than 3 p.m.)**. For this special challenge, every student who submits the required solutions will receive a holiday rubber ducky.

Kinder, First & Second Grade: Solve at least 5 problems.

Third & Fourth Grade: Solve at least 8 problems.

Fifth & Sixth Grade: Solve at least 11 problems.

Liya is so excited about the holiday season. She's planning her holiday shopping. Here is a list what she is planning to buy for her family:

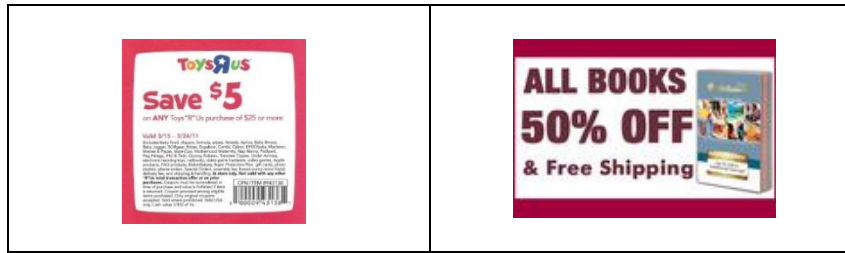
 Mom (\$9.50)	 Sister (\$12.75)	 Brother (\$12.50)	 Dad (\$8.50)
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- How much will it cost to buy gifts for Liya's parents?
Answer: _____
- How much will it cost to buy gifts for Liya's siblings?
Answer: _____
- How much money does Liya need to buy gifts for all of her family?
Answer: _____
- Liya will give warm gloves to her teacher, grandmother, aunt and two friends as holiday gifts. Three pairs of gloves are yellow and other two are red and pink. Which of the gloves will her teacher get, if you know that the gloves for aunt and friends were same color and that grandmother does not like pink?
Answer: _____
- If each pair of gloves is \$3.50, how much money does Liya need to buy gloves for her teacher, grandmother, aunt and two friends?
Answer: _____
- Liya has been saving for a few months and currently has \$35. She has three more weeks before she has to start her holiday shopping. She is planning to save \$4 each week in next three weeks to add to her current savings. Liya's mom wants to motivate Liya to save money and agreed to give her \$2 on every \$10 she has saved and will save.
 - What will be total amount of her saving in three weeks?
 - How much money will she get from her mom?
 - What will be total amount of money she can spend for holiday shopping?

Answers: a. _____ b. _____ c. _____



Liya knows that she can save money with coupons and is excited that she has two of them..



7. How much is her total savings if she is buying a toy for her brother at Toys R Us and a book for her mom at the bookstore? Prices are shown in the table above the problem No1.
(Toys R Us coupon is \$5 off and book store coupon is 50%)
Answer: _____
8. After using her coupons, will Liya have enough money to buy all the gifts she planned including the gloves?
Answer: _____.
9. Liya is planning to send some holiday cards to her family overseas. She bought stamps at the post office. Some of the stamps have a snowflake design, some have a jingle-bell design, and some have a reindeer design. Reindeer stamps cost 25 cents, Snowflake stamps cost 55 cents and jingle bell stamps cost \$1. She bought 7 snowflake stamps, 3 more reindeer stamps than snowflake stamps, and 5 fewer jingle bell stamps than reindeer stamps.
- a. How many stamps did Liya buy in all?
 - b. How much did Liya pay for all stamps?
- Answers: a. _____ b. _____
10. An adult ticket for Nutcracker performance is \$25 and a child ticket is \$5 less expensive. Liya also has a coupon 25% off the entire purchase. How much will the tickets cost for Liya's family of 5 (2 adults and 3 children)?
Answer: _____
11. How much money does Liya need for all her holiday season expenses?
(The expenses include: gifts for parents, siblings, gloves for her teacher, grandmother, two friends and aunt, stamps, and Nutcracker tickets. Do not forget to apply coupons.)
Answer: _____

Extension:

Do you know the following Christmas song? The song follows the same structure through 12 days.

On the 1st day of Christmas my true love gave to me a partridge in a pear tree.

On the 2nd day of Christmas my true love gave to me 2 turtle doves, and a partridge in a pear tree.

On the 3rd day of Christmas my true love gave to me 3 French hens, 2 turtle doves, and a partridge in a pear tree.

... and so on.

How many total presents were given from the first day through the twelfth day?

Math Challenge 7 will be available on **January 6, 2012** at www.mathinaction.org and in our school's newsletter on **January 9, 2012**.

