

Multiple Discounts

7th Grade Math

Name: key

You may use a calculator to solve each of the following problems. However, you must still show your work by writing out each calculation that you do.

1. Keith goes to Jay's Sporting Good in Clare, MI to buy a new sleeping bag. He was mailed a coupon in the mail for 15% off one item in the store. When he gets there, he notices that all camping items are already 20% off. The sleeping bag he decides to buy is 59.99. How much does Keith save and how much is his balance (before taxes)?

$$\text{1st Disc.} \rightarrow \$59.99 \cdot .2 = \$12$$

$$\text{1st S.P.} \rightarrow \$59.99 - \$12 = \$47.99$$

$$\text{2nd Disc.} \rightarrow \$47.99 \cdot .15 = \$7.2$$

$$\text{2nd S.P.} \rightarrow \$47.99 - \$7.2 = \$40.79$$

Total Savings: \$19.2

Final Price: \$40.79

2. Courtney goes to Ann Taylor and finds a shirt that is \$34.50. She looks up and notices it is on the clearance rack for 70% off. When she takes it to the register to pay for it the sales person asks her if she would like to open a credit card for an additional 10% off. What is the balance if she **does** open a credit card? What is the balance if she **does not** open a credit card?

$$\text{1st Disc.} \rightarrow \$34.50 \cdot .7 = \$24.15$$

$$\text{1st S.P.} \rightarrow \$34.5 - \$24.15 = \$10.35$$

$$\text{2nd Disc.} \rightarrow \$10.35 \cdot .1 = \$1.04$$

$$\text{2nd S.P.} \rightarrow \$10.35 - \$1.04 = \$9.31$$

w/out credit card \rightarrow \$10.35

with credit card \rightarrow \$9.31

3. GM in Lansing had 2,500 workers in their plant in 2004. In 2005, 30% of their workers were laid off due to budget cuts. In 2006, they must lay off another 15%. How many workers will they have after the second round of layoffs?

$$\underline{1^{st}} \text{ layoff } \quad 2,500 \cdot .3 = 750 \text{ workers}$$

$$\underline{1^{st}} \text{ Total } \quad 2,500 - 750 = 1,750 \text{ workers}$$

$$\underline{2^{nd}} \text{ layoff } \quad 1,750 \cdot .15 = 263 \text{ workers}$$

$$\underline{2^{nd}} \text{ Total } \quad 1,750 - 263 = 1,487 \text{ workers}$$

After 2nd round of layoffs \rightarrow 1,487 workers

4. Dan goes to L&L on double coupon day to buy his kid's favorite cereal, Apple Jacks. On the previous Sunday, he found two coupons in the newspaper for Apple Jacks. One for 15% and one for 10%. What is his final cost **AFTER 6% SALES TAX** if the Apple Jacks are originally priced at \$3.99? (Be careful...there are **THREE** calculations to make)

$$\underline{1^{st}} \text{ Disc. } \rightarrow \$3.99 \cdot .15 = \$0.6$$

$$\underline{1^{st}} \text{ S.P. } \rightarrow \$3.99 - \$0.6 = \$3.39$$

$$\underline{2^{nd}} \text{ Disc. } \rightarrow \$3.39 \cdot .1 = \$0.34$$

$$\underline{2^{nd}} \text{ S.P. } \rightarrow \$3.39 - \$0.34 = \$3.05$$

$$\text{Tax } \rightarrow \$3.05 \cdot .06 = \$0.18$$

$$\text{Grand Total } \$3.05 + \$0.18 = \$3.23$$

5. Now, write your own multiple discount story problem and provide the solution.

A football costs \$100. There's a 20% off on the rack. You also have a 10% off coupon. What's the final price?

$$\underline{1^{st}} \text{ Disc. } \rightarrow \$100 \cdot .2 = \$20$$

$$\underline{1^{st}} \text{ S.P. } \rightarrow \$100 - \$20 = \$80$$

$$\underline{2^{nd}} \text{ Disc. } \rightarrow \$80 \cdot .1 = \$8$$

$$\underline{2^{nd}} \text{ S.P. } \rightarrow \$80 - \$8 = \$72$$

Final Price \$72