Algebra/Geometry Institute Summer 2006

Lesson Plan 3: Finding Discount and Sale Price

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Grade Level: 7th

1. Teaching Objective
   - 1m. Solve real-life problems involving sales tax, discount, and simple interest.
   - This lesson will focus on discount.

2. Instructional Activities
   (This lesson will be implemented after all students have mastered finding sales tax.)

   - The teacher will start the class with a five problem review on subtracting decimals. (See Attachment 1)

   - The teacher will review each review problem with the students. The teacher will call a student to work each problem on the overhead.

   - The teacher will introduce the lesson by asking the students what they think of when they hear the word “discount”. The teacher will discuss the answers the students call out.

   - The teacher will tell the students that discount is the amount that an item is reduced from its retail price.

   - The teacher will explain to the students that to find the amount of discount, multiply the retail price by the discount rate and round to the nearest cent. The teacher will tell the students that the discount rate may be expressed as a percent or a fraction and to convert it to a decimal before multiplying.

Discount = retail price • discount rate

- The teacher will explain to the students that to find the sale price of an item, subtract the amount of discount from the retail price.

  sale price = retail price – discount

- The teacher will read an example to the class and work it on the overhead.

  Example: At a one-day, 25% off sale, Brian bought a shirt. If the retail price of the shirt was $18.50, what was the sale price?

  First find the amount of discount

  discount = retail price • discount rate
  discount = 18.50 • .25
  discount = 4.625 ≈ $4. 63

  The amount of discount is $4. 63.

  Then find the sale price.

  sale = retail price – discount
  sale = 18.50 – 4.63
  sale = $13.87

  The sale price of the shirt was $13.87.

- The teacher will work more examples like this one on the overhead. The teacher will have the students help with solving the problems.

- The teacher will give a five problem activity sheet to check for understanding. The teacher and students will work the first problem together. (See Attachment 2)

- The teacher will have students arrange their desks so they can work in groups. The teacher will put students into groups of four.

- The teacher will give each group a sales advertisement from a department store. (The teacher will collect these prior to this lesson)

- The teacher will explain the directions to the students. The directions are for each group to pretend that they have $100 to spend at the department store. The students should make a purchase or purchases and determine the total cost including 7% sales tax without overspending.

- The teacher will have each group present their project to the class. The teacher and students will observe to make sure no mistakes were made on any group's project.

3. Materials

- Overhead projector
- Pencil
- Notebook
- Attachment 1
- Attachment 2
- Sale advertisements

Resources

- Website: www.mde.k12.ms.us/docs/Math_Framework_2006.pdf
- Textbook: Glencoe Mathematics; The McGraw-Hill Companies. Copyright 2001.
- Buckle Down Mississippi MCT; Buckle Down Publishing. Copyright 2005.

4. Assessment

- Teacher observation of student participation.
- The teacher will observe students as they work in their seats.
- Performance assessment: The teacher will allow each group to explain their project to the class.

Attachment 1

Five Problem Warm-Up

Solve each problem.

1. 1,890 – 8.543 =
2. 916.88 – 23.894 =
3. 325.652 – 98.679 =
4. 135.981 – 34 =
5. 7.452 – 7.209 =

Attachment 2

Activity Sheet

Solve each problem.

1. The jewelry store has a necklace with a retail price of $453.70. It is on sale for 60% off the retail price. What is the sale price of the ring? _____

2. Mary works at a pizza place in her town. She receives 20% discount on any pizza she buys. If a medium pizza costs $8.99, what is the cost of Mary's pizza? _____

3. Macy's department store is having its annual one day sale. If a customer spends between $150 - $249, he or she gets 25% off the total bill. How much money will Brad save if he spends $175?

4. All students from the University get a 10% discount at all stores in the mall. If Julie spends $102.45 at the video store, how much money will her student discount save her? _____

5. The retail price of an aquarium set at the Pet Shop is $145. The aquarium sets are on sale at $\frac{2}{5}$ off their retail price. What is the sale price of an aquarium set at the Pet Shop? _____