

## Lesson: Compare and order rational and negative rational numbers

### Sixth Grade Objective:

1.01 Develop number sense for negative rational numbers b) compare and order

1.03 Compare and order rational numbers

1.04 Develop fluency in addition, subtraction, multiplication and division of nonnegative rational numbers. Decimals

### Review.

#### Try these on your own!

Arrange in descending order.

1.  $-3.65$ ,  $\frac{5}{8}$ ,  $67\%$ ,  $-\frac{4}{5}$
2. Amy, Sarah and Susan entered their frogs in a jumping contest. Sarah's frog, Fran, jumped 4.25 ft. and Susan's frog, Frank, jumped  $48\frac{1}{2}$  in. Amy's frog, Fred, jumped  $-48\frac{1}{2}$ . Which Frog jumped the farthest and what happened to Amy's frog, Fred?
3. Which is smaller .00000345 or .0000345?
4. Stephen went to dinner with his parents. Stephen's dinner was \$10.79 and his parents were \$12.79 each. What was the total of their dinner including 15% sales tax?

#### Check your answers!

1.  $67\%$ ,  $\frac{5}{8}$ ,  $-\frac{4}{5}$ ,  $-3.65$
2. Frank and Fred jumped the farthest, but Fred jumped backwards!
3. .00000345
4. The dinners cost \$36.37. To calculate the tip you convert 15% to a decimal and multiply. When you multiply \$36.37 by .15 you get 5.4555. Does that look like money? No, we must round to the nearest hundredths to get \$5.46 and then add that to the total to make the final price for dinner \$40.93.

**ACTIVITY 1:**

Larry went to the store and bought 11 items.  
Order the items in descending order.

**ACTIVITY 2:**

Larry forgot to show his coupons to the cashier. He had one for 35 cents, one for 23 cents and one for 30 cents. Calculate the Subtotal, Tax 1, Tax 2 and Total including Larry's coupons.

<b>Stephen's Grocery Double Coupons Everyday</b>	
Waffles	2.18
Strawberries	1.50
Garlic	.3
Yogurt	2.88
Apples	4.99
Muffin Mix	.77
Trash bags	2.94
Turkey Bacon	3.99
Coffee	1.19
Avocado	.4
Mint	.01
No coupons	
Subtotal	????
Tax 1 6.75%	????
Tax 2 2.00%	????
Total	????

**ACTIVITY 3**

Print and cut out blocks.  
Arrange in ascending order.

$\frac{3}{7}$	-0.3555	78.34%	$\frac{5}{9}$	$-\frac{3}{4}$	3.25
67%	.00004	$\frac{1}{3}$	23%	$\frac{4}{9}$	44%
-0.35555	-1.23	-34%	$\frac{1}{2}$	9%	.9

**Check your answers.**

**Activity 1:**

Apples, Turkey Bacon, Trash bags, Yogurt, Waffles, Strawberries, Coffee, Muffin Mix, Avocado, Garlic, Mint

**Activity 2:**

**Subtotal:** 19.39 (Remember the receipt says double coupons everyday)

**Tax:** 19.39(6.75%) Remember: Before you multiply a percent you must first convert it to a decimal.

$$19.39(.0675) = 1.308825 = \mathbf{\$1.31}$$

**Total:** Add \$19.39 + \$1.31 = **\$21.70**

**Activity 3:**

**Print and cut out blocks.**

**Arrange in ascending order.**

-1.23	$-\frac{3}{4}$	-0.35555	-0.3555	-34%	.00004
9%	23%	$\frac{1}{3}$	$\frac{3}{7}$	44%	$\frac{4}{9}$
$\frac{1}{2}$	$\frac{5}{9}$	67%	78.34%	.9	3.25

To make this easier convert all numbers to decimals or percents!