

Name \_\_\_\_\_

Date \_\_\_\_\_

## Inequality Constraint or Condition Word Problems - Step-by-Step Lesson

### Lesson 1 Word Problems

Laura wants to order a purse on eBay. Each purse costs \$630 and there is a \$0.25 merchant fee for each purse. Laura has \$700 to spend.



- Write an inequality that represents Laura situation.
- How many purses can Laura order without exceeding her \$700 limit?

### Explanation:

Let  $x$  = The number of purses.

The total cost of a purse is  $(\$630 + \$0.25)$  or 630.25

There is a maximum amount that the cost cannot be greater than (\$700)

Total cost  $\leq$  \$700

$X(630.25) \leq \$700$

- We have to find what  $x$  would equal under these conditions.

Get  $x$  by itself to determine the total number of purses. We can do this by dividing both sides by the cost (\$630.25)

$X (630.25) \div 630.25 \leq \$700 / 630.25$

We can only interpret purses as a whole number.

$X \leq 1.11$

Since you can't order a part or .11 of a purse, the total number of purses is equal to 1.

