She has decided to add three pairs of pants today and think about tops tomorrow.

Being well acquainted with the Internet, Charlene asks her mom if she can try shopping online. They visit several sites, and Charlene finds two that will fill all her needs. She is trying to determine the best option.

SuperSlacks.com has pants for $23.49 each. They have a special deal for first purchases - no shipping and handling charges.

BetYourBottoms.com has pants for $24.99 each, and they charge $1.25 per item shipping and handling on orders under $50.00. They also have a new shopper deal - 10% off (before shipping and handling fees).

Where should Charlene place her order?

**Extra:** Charlene has discovered that both companies are in her state, so she has to pay tax. If she lived in your state, how much tax would she pay? (Don’t forget to say what the tax rate is for your state.)

*Please note that the sites in this problem are fictitious - not places to try to do your shopping!*

**MATH STANDARDS ALIGNMENT:**
- Fluently add and subtract multi-digit whole numbers using the standard algorithm.
- Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

**Personal Finance Big Ideas:**
- *What is Money, Scarcity*
METHOD 1: NOTICE, I WONDER™
After reading the problem, our group decided to write down everything we noticed and wondered:

I Notice…. I Wonder….
Charlene grew 6 inches over the summer Why does SuperSlacks have no shipping?
She needs 3 new pairs of pants Since BetYourBottoms has 10% off, will they have cheaper pants?
Charlene wants to order them online What online place has a better deal?

Superslacks.com has pants for $23.49 each with no shipping and handling
BetYourBottoms.com has pants for $24.99 with shipping and handling on orders under $50
BetYourBottoms.com has a deal for 10% off orders before shipping and handling fees.

She needs 3 pair of pants and 2 pair of each is about $50

10% off of 24.99 is $2.50 making the new price $22.49

We made our decision because
• 2 pair of pants are about $50 at both stores
• 3 pairs would be over $50 so there wouldn’t be any shipping at BetYourBottoms
• the discount price of BetYourBottoms pants would be cheaper

Without having to pay shipping for either order, the 10% discounted price made BetYourBottoms.com the better deal.

METHOD 2: MAKE A TABLE
We thought about the two different shopping sites by making a table. After reading the problem, we knew that we had to find the cost for 3 pair of pants from SuperSlacks and 3 pair of pants from BetYourBottoms. Our table looked like this:

<table>
<thead>
<tr>
<th>Place</th>
<th>Price</th>
<th>Shipping &amp; Handling Fee</th>
<th>Discounts</th>
<th>Price of 3 pairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>SuperSlacks</td>
<td>$23.49</td>
<td>None</td>
<td>None</td>
<td>$23.49 x 3 = $70.47</td>
</tr>
<tr>
<td>BetYourBottoms</td>
<td>$24.99</td>
<td>$1.25 for orders under $50. ($24.99 x 3 = $74.97 so there is no fee)</td>
<td>10% before shipping. $24.99 x .10 = $2.50 New price = $22.49</td>
<td>$22.49 x 3 = $67.47</td>
</tr>
</tbody>
</table>

EconomicsCenter
We calculated whether or not each place would have shipping & handling fees. We knew that SuperSlacks had no shipping and handling fee and we figured out that the BetYourBottoms order would be over $50:

\[24.99 \times 3 = 74.97\]

That convinced us there would be no fee when ordering three pairs of pants.

Next we figured out the discount prices. SuperSlacks had no discounts, but BetYourBottoms did. We figured out 10% of 24.99 by doing:

\[24.99 \times .10 = 2.50\]

We then wanted to find the new price of the jeans with the discount applied and found:

\[24.99 - 2.50 = 22.49\] as the new price.

Finally in the last column we calculated the total price from each place for 3 pair of pants:

SuperSlacks:

\[23.49 \times 3 = 70.47\]

BetYourBottoms:

\[22.49 \times 3 = 67.47\]

We saw that BetYourBottoms had a cheaper price.

**Extra:** For the extra we could’ve added in another column for state tax. The state tax in New Jersey is 7%. It varies from state to state. We calculated:

\[70.47 \times .07 = 4.93\]

\[70.47 + 4.93 = \$75.40\] for the final price of Superslacks.

We followed the same steps for BetYourBottoms:

\[67.47 \times .07 = 4.72\]

\[67.47 + 4.72 = \$72.19\] for the final price of pants at BetYourBottoms.
METHOD 3: LOGICAL REASONING

My group was wondering if it was possible to figure out this problem by doing little to no calculations. We started off by making a table to organize our ideas:

<table>
<thead>
<tr>
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<th>Price</th>
<th>Shipping &amp; Handling Fee</th>
<th>Discounts</th>
</tr>
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</tr>
<tr>
<td>BetYourBottoms</td>
<td>$24.99</td>
<td>$1.25 for orders under $50.</td>
<td>10% before shipping. 10% of 24.99 is $2.50</td>
</tr>
</tbody>
</table>

We decided to not figure out how much it would cost for 3 pair of pants, but instead use the information we had to make an educated guess on which pants company would cost less. We figured out that BetYourBottoms would have cheaper pants based on these reasons:

Looking at the chart we saw that:

- Both prices are close to $25 and we know that 25 x 2 = 50 so a third pair of pants would make it way over $50, meaning neither place would have shipping.
- We noticed that BetYourBottoms had a discount sale going on, so the only calculation we did was 10% off of 24.99, which we rounded to 25 and easily got 2.50 off. Doing 25.00 – 2.50 we got $22.50.

Since the new price for BetYourBottoms was $22.50 we were able to figure out without doing all the arithmetic that they would have the cheaper pants.