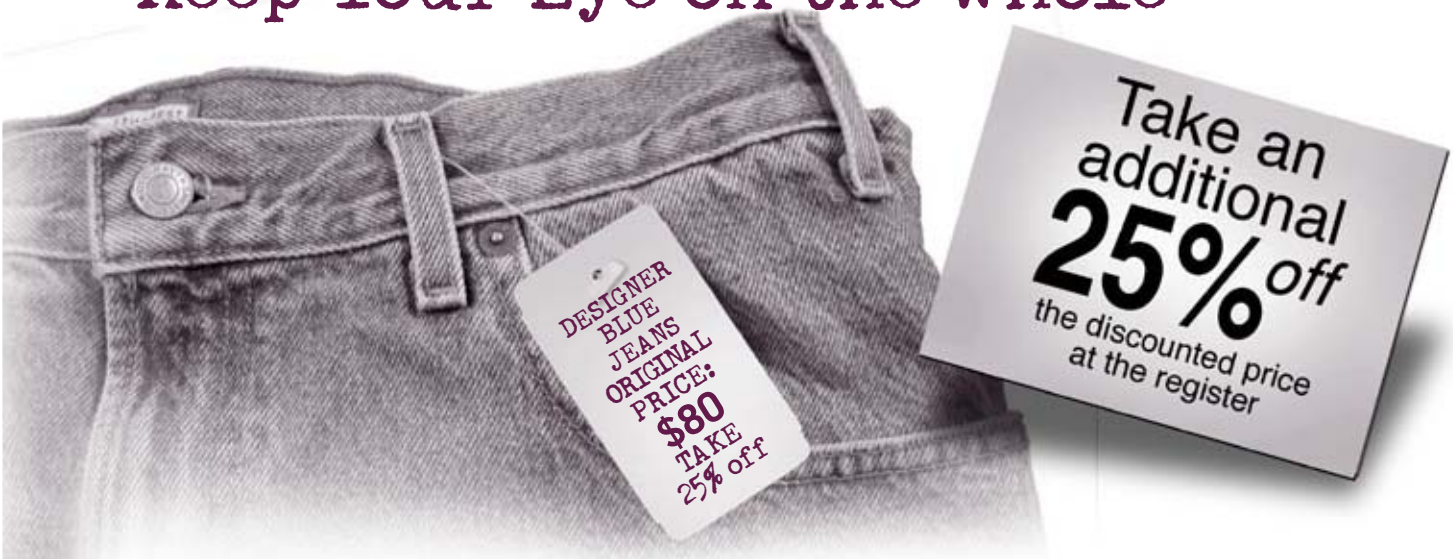
Keep Your Eye on the Whole

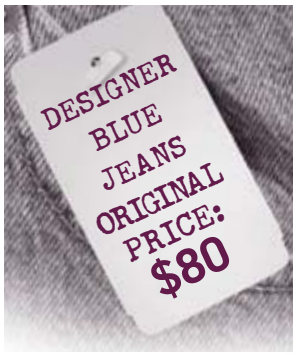


Store sales can be confusing. Check out the price tag for those $80 jeans. They're reduced by 25% percent, right? But the store sign says you'll get another 25% percent off at the register. Does that mean the jeans are 25%+25%, or 50%, off? Since 50% is half off, does this mean the jeans only cost $40?

Actually, they will cost a little more. Surprised? To know the final price, it helps to understand the math behind multiple markdowns.

OF WHAT?

When you talk about a "percent" of something, you're talking about a part of a whole — a part of 100%. But what is the 100%? In other words, "What's the WHOLE you're taking a PART of?"



In this bargain sale, the label says you can take 25% off the original price. So 25% is the **PART**. But again, **OF WHAT**? What's the **WHOLE**?

The **WHOLE** (100%) is $80, the original price of the blue jeans.

WHAT'S THE SALE PRICE THEN?

Step 1: Figure out 25% of the WHOLE by changing the percent to a decimal and multiplying.

Like this: $80 x 0.25 = $20

Step 2: Subtract the PART (25%) from the WHOLE to get the sale price.

Like this: $80 – $20 = $60

Did you know?

Here is another way to find the PART of this WHOLE:

25% is one quarter or 1/4 of 100% (think of the four quarters —25%— in a dollar). When you quarter something, you divide it into four parts. So divide $80 into four parts, and subtract one of them for the new price.

$80 ÷ 4 = $20 $80 – $20 = $60

Now you know that the sale price is $60. But don't pay yet! You get an additional markdown at the register — another 25%.

But 25% **OF WHAT?** This time, you have a new WHOLE — $60.

NOW DO THE MATH

REPEAT THE SAME TWO STEPS.

Step 1: What is 25% of $60?

_____

Step 2: What's the final sale price of the blue jeans?

_____

(Did you remember to subtract the PART from the WHOLE?)

YOUR TURN

Keep your eye on the whole and calculate the final sale price on these multiple markdowns:

1. The Big Store is running a sale on gas grills. The original price of a Cheery Chef grill was $320, but the current sale price is 30% off. There's also a Father's Day special, where the customer gets another 10% off the sale price with a store coupon. If a customer gets all the deductions, how much will the grill cost?

Do the math here:

Step 1: _____

Step 2: _____

Repeat Step 1: _____

Repeat Step 2: _____

Final Price: _____

2. Irene has had her eye on a $250 beaded dress for a long time. This week it's on sale, 15% off. Because Irene works at the store on Saturdays, she can get another 20% off the sale price. What will she pay ?

Do the math here:

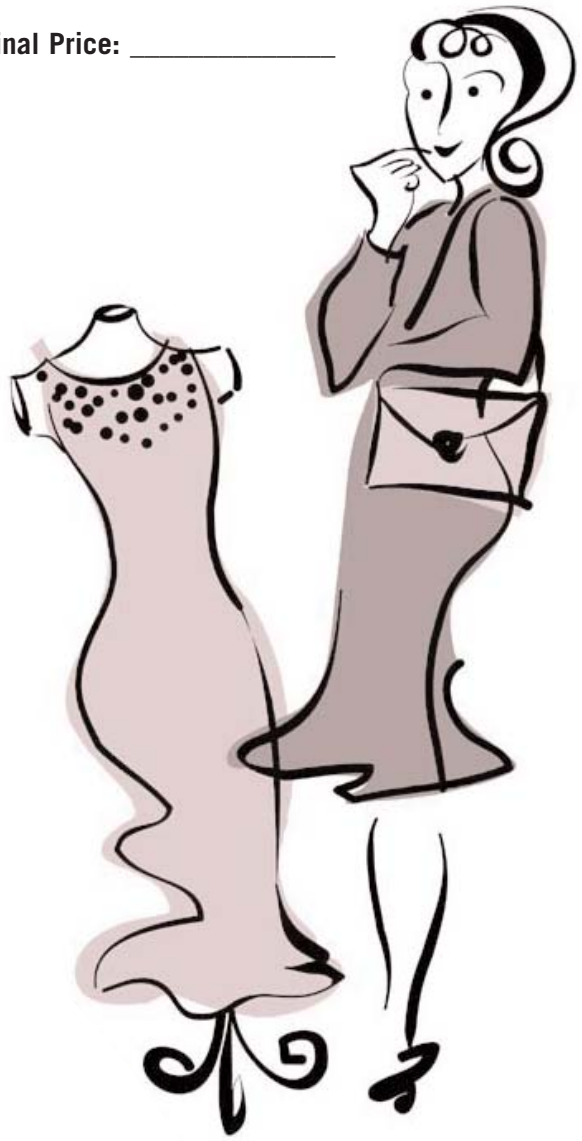
Step 1: _____

Step 2: _____

Repeat Step 1: _____

Repeat Step 2: _____

Final Price: _____



Answers:

NOW DO THE MATH: Step 1: $60 x 0.25 = $15 **Step 2:** $60 – $15 = $45

YOUR TURN: 1) Step 1: $320 x 0.30 = $96; **Step 2:** $320 – $96 = $224; **Repeat Step 1:** $224 x 0.10 = $22.40; **Repeat Step 2:** $224 – $22.40 = $201.60

2) Step 1: $250 x 0.15 = $37.50; **Step 2:** $250 – $37.50 = $212.50; **Repeat Step 1:** $212.50 x 0.20 = $42.50; **Repeat Step 2:** $212.50 – $42.50 = $170