Markup & Markdown Problems Worksheet

1. You have a coupon for an additional 25% off the price of any sale item at a store. The store has put a robotics kit on sale for 15% off the original price of $40. What is the price of the robotics kit after both discounts?

2. A sign says that the price marked on all music equipment is 30% off the original price. You buy an electric guitar for the sale price of $315.

   a) What is the original price?

   b)   How much money did you save off the original price of the guitar?

   c) What percent of the original price is the sale price?

3. The cost of a New York Yankee baseball cap is $24.00. The local sporting goods store sells it for $30.00. Find the markup rate.

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$(0.75)(0.85)(40) = 25.50$. *The price of the robotics kit after both discounts is $25.50.*

2. A sign says that the price marked on all music equipment is 30% off the original price. You buy an electric guitar for the sale price of $315.

 a) What is the original price?

$\frac{315}{1-0.30} = \frac{315}{0.70} = 450$. *The original price is $450.*

 b) How much money did you save off the original price of the guitar?

$450 - 315 = 135$. *I saved $135 off the original price of the guitar.*

 c) What percent of the original price is the sale price?

$\frac{315}{450} = \frac{70}{100} = 70\%$. *The sale price is 70% of the original price.*

3. The cost of a New York Yankee baseball cap is $24.00. The local sporting goods store sells it for $30.00. Find the markup rate.

Let P represent the unknown percent.
$$30 = P(24)$$

$P = \frac{30}{24} = 1.25 = (100\% + 25\%)$. *The markup rate is 25%.*