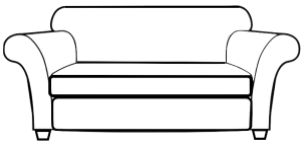
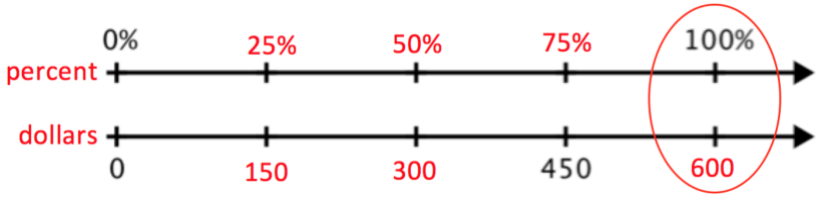
Percent Change Tasks – Example Answers

1) A sofa is on sale for 25% off.
The sale price is $450.
What was the original price?



a. Complete the double number line to answer the problem:



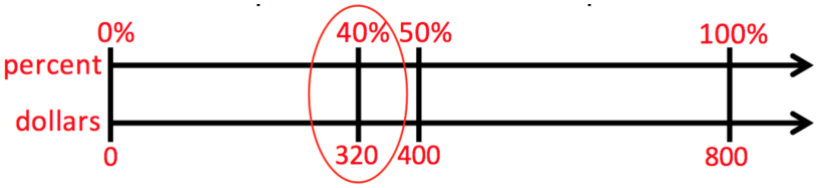
I saw that 3 intervals on the number line are $450, so each interval is $150. Then I added $150 to $450 to get $600 at 100%.

b. What was the original price?

The original price was $600.

2) A computer has a sale price of $320. The original price was $800.
What percent has been taken off the original price?

a. Make a diagram to answer the problem:



I marked 50% as 400, and I noticed 320 is 80 less than 400. I know 80 is 10% of 800, so 320 is 50%-10%=40% of the original price. To get down to 40% of the original, the sale is 60% off.

b. What percent has been taken off the original price?

The computer is on sale for 60% off the $800 original price.

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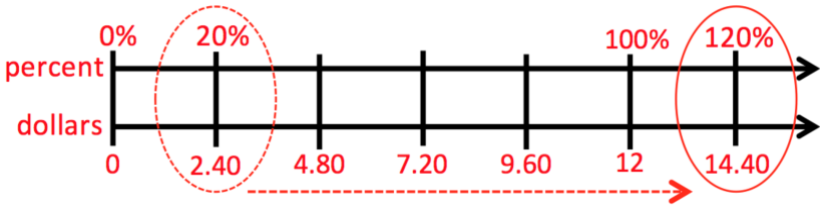
3) Khalil buys a T-shirt at a soccer game for $12.00. He marks it up 20%, then he resells it. What is his markup amount?

a. Make a diagram to answer the problem:



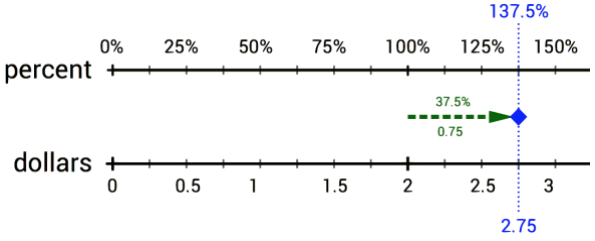
I marked 12 as 100%. Since I knew I needed 120%, I divided up the number line to 100% into 5 parts or 20% each, and divided 12 by 5 to get $2.40 for each 20%. I added $2.40 and $12 to find the cost of the T-shirt when Khalil resold it, which is $14.40.

b. What is Khalil's markup amount?

The markup amount is $2.40, which is 20% of 12.

4) A grocer bought 5 pounds of potatoes from a local farmer for 40¢ per pound. She then sold them for $2.75 for a 5-pound bag.

a. Make a diagram to represent the problem context:



100% is 5($0.40) or $2.00

b. How much did she mark up the potatoes? **She marked up the 5 lbs. of potatoes by $0.75.**

c. What was the markup rate (as a percentage)? **She marked up the potatoes 37.5%.**

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