

HW: Percent Change Worksheet

Warm up:

1) In 2006, there were 142 students at Newtown High School. In 2009, there were 186 students. What was the percent change?

$$\frac{186-142}{142} = \frac{44}{142} = 30.99\%$$

2) A grocery store sells boxes of cereal for \$4.59. If sales tax in NJ is 6.625%, what is the total cost of a box of cereal?

$$1.06625(4.59)$$
$$\$4.89$$

A DVD player costs \$140 and the sales tax is 5.75%. What is the total cost of the DVD player?

$$1.0575(140) = \$148.05$$

A cell phone is on sale for 30% off. If the sale price is \$239.89, what is the original price?

$$\frac{0.7x}{0.7} = \frac{239.89}{0.7}$$

$$x = \$342.70$$

A store buys TVs and marks them up 70%. If they are selling a TV for \$540, how much did they pay for it?

$$\frac{1.7x}{1.7} = \frac{540}{1.7}$$
$$x = \$317.65$$

Cindy bought a computer for \$480 and sold it for \$820. What was the markup?

$$\frac{820-480}{480} = \frac{340}{480}$$

$$0.708\overline{3333}$$

$$70.8\overline{3}\%$$

Over the last 5 years, enrollment at the state college has dropped by 4.8%. If the current enrollment is 1425, what was the enrollment 5 years ago? **95.2%**

$$\frac{0.952x}{0.952} = \frac{1425}{0.952}$$

$$x = 1496.848739$$


1497 students

A store buys bags of chips for \$1.27 and marks them up by 140% before they sell them. How much do they charge for the bags of chips?

$$2.4(1.27) = 3.048$$

$$\$3.05$$

What is markup?

 http://money.cnn.com/galleries/2010/news/1001/gallery.americas_biggest_ripoffs/index.html

- 1) Macy's is having a 60% off sale on everything in the store. If they are selling a pair of shoes for \$34, what was the regular price?
- 2) A hardware store buys shovels for \$4 and sells them for \$11. What is the percent mark up?
- 3) Jason invested in Apple stock when the price was \$422 per share. Since then, it has increased by 78%. What is the current price?
- 4) Mandy owns a seafood market. If all of her products are marked up 230% and she is selling tuna for \$22/lb, how much did she pay for the tuna?

1) Macy's is having a 60% off sale on everything in the store. If they are selling a pair of shoes for \$34, what was the regular price?

$$\frac{0.4x = 34}{0.4 \quad 0.4}$$

$$x = 85$$

$$\text{\$85}$$

2) A hardware store buys shovels for \$4 and sells them for \$11. What is the percent mark up?

$$\frac{11-4}{4} = \frac{7}{4} = 1.75$$

175%

3) Jason invested in Apple stock when the price was \$422 per share. Since then, it has increased by 78%. What is the current price?

$$1.78(422)$$

$$\$ 751.16$$

4) Mandy owns a seafood market. If all of her products are marked up 230% and she is selling tuna for \$22/lb, how much did she pay for the tuna? $100\% + 230\% = 330\%$

$$\frac{3.3x}{3.3} = \frac{22}{3.3}$$

$$x = 6.6666\bar{6}$$

$$\$6.67/\text{lb}$$

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