Name __A w__

M.U. = Markup

Amount Paid		% Paid
Original	=	100

Amount Disc/M.U.		% Disc/M.U.
Original	=	100

For #1-10, complete the following table, show all of your work on a separate sheet of paper.

	Old Price	Percent of Change (Disc/M.U.)	Amount of Change (Disc/M.U.)	New Price
1.	$12	25% discount	.25 of 12 = .25 × 12 = 3 $\frac{x}{12} = \frac{25}{100}$ = 100x = 300 x = 3	12 - 3 = $9
2.	$60	10% markup	.10 × 60 = 6 OR $\frac{x}{60} = \frac{10}{100}$ 100x = 600 x = 6	60 + 6 = $66
3.	$50	$\frac{?}{} = .20 = 20\%$↑	$10 m.u.	$60
4.	$120	$\frac{120}{120} = 1 = 100\%$↑	$120 m.u.	$240
5.	$200	$\frac{230-200}{200} = \frac{30}{200} = .15$ 15%↑	$30 markup	$230
6.	$250	$\frac{150}{250} = .6 = 60\%$↓	$100 discount	$150
7.	$400 $\frac{48}{x} = \frac{12}{100}$	12% discount	$48 discount	$352
8.	$50 $\frac{2.50}{x} = \frac{5}{100}$	5% markup	$2.50 markup	$52.50
9.	$200 $\frac{160}{x} = \frac{80}{100}$	20% discount	$40 disc.	$160
10.	$\frac{50}{x} = \frac{150}{100}$ x = 33.33	150% markup	$16.67	$50

For #11-17, ... solve each problem.

11. A basketball backboard set that sold for $79 was discounted 15%. What is the new price?

$$79 \times .15 = 11.85$$
$$79 - 11.85 = \boxed{\$67.15}$$

12. A parka that sold for $65 is marked up to $70.20. What is the percent of the markup?

$$\frac{70.20 - 65}{65} = \frac{5.2}{65} = .08 = \boxed{8\% \ markup}$$

13. A stereo tape deck that sold for $235 was on sale for $202.10. What was the percent of discount?

$$\frac{235 - 202.10}{235} = \frac{32.9}{235} = .14 = \boxed{14\% \text{ discount}}$$

14. At the end-of-summer sale, an air conditioning that sold for $310 was discounted 21%. What was the sale price?

$$310 \times .21 = 65.10$$
$$310 - 65.10 = \boxed{\$244.90}$$

15. Because of an increase of 8% in wholesale prices, a shoe store had to mark up its new stock by the same percent. What was the new price of a pair of shoes that had sold for $24.50?

$$24.50 \times .08 = 1.96$$
$$24.50 + 1.96 = \boxed{\$26.46}$$

16. A department store has a sale on gloves. The sale price is 18% less than the original price, resulting in a savings of $2.97. What was the original price of the gloves? What was the sale price of the gloves?

$$18\% \text{ of } x = 2.97$$
$$\frac{2.97}{x} = \frac{18}{100}$$
$$18x = 297$$
$$\boxed{x = \$16.50}$$

17) During the 75% off sale, Chad pays $22 for a wooden bench. What was the original price?

$$\frac{22}{x} = \frac{25}{100}$$

$$25x = 2200$$

$$\boxed{x = \$88}$$

18) A computer software retailer used a markup of 40%. Find the selling price of a computer game that cost the retailer $25.

$$25 \times .4 = 10$$

$$25 + 10 = \boxed{\$35}$$

19) A golf shop pays its wholesaler $40 for a certain club, and then sells it to a golfer for $75. What is the markup rate?

$$\frac{75 - 40}{40} = \frac{35}{40} = .875 = \boxed{87.5\%}$$

20) An item that regularly sells for $425 is marked down to $318.75. What is the discount rate?

$$\frac{425 - 318.75}{425} = \frac{106.25}{425} = .25 = \boxed{25\%}$$

21) A shoe store uses a 40% markup on cost. Find the cost of a pair of shoes that sells for $63. before the markup.

$$63 \times .4 = 25.2$$

$$63 + 25.2 = \boxed{\$88.20}$$