

March 9, 2015 ^{5th}
_{6th}
Starter

1. What is 3% of 15?

2. 12 is what percent of 40?

3. 36 is 75% of what number?

Gigi

3/9 Sales Tax, Discount, and Mark-Up

Original price of a telescope: \$219.50

Tax: 7.25%

Find 7.25% of \$219.50 then
add it to the original price.

7.25% of \$219.50

$(.0725)(219.50)$

$0.0725 \times 219.5 = 15.91375$

= \$15.91 tax

\$219.50

+ 15.91

\$235.41



Original price of a truck: \$44,000.00

Tax: 7.375%

$$\begin{aligned} & (.07375)(44000) \\ & 0.07375 \times 44000 = 3245 \\ & = \$3245 \text{ tax} \end{aligned}$$

$$\begin{array}{r} \$44,000 \\ + \quad 3245 \\ \hline \$47,245 \end{array}$$



Find 7.375% of \$44,000 then add it to the original price.

Find the sale price of the bike if:
Original price of a bicycle: \$500.00
Discount: 40% *off*



Find 40% of 500 then subtract
it from the original price.

40% of 500

$(.40)(500)$

= \$200 *discount*

\$500

- 200

\$300 *sale price*

Original price of a camera: \$149.95

Discount: 15%

Find 15% of 149.95 then subtract it from the original price.

$$\begin{aligned} &15\% \text{ of } 149.95 \\ &(0.15)(149.95) \\ &= \$22.49 \end{aligned}$$

$$0.15 \times 149.95 = 22.4925$$

$$\begin{array}{r} \$149.95 \\ - 22.49 \\ \hline \$127.46 \end{array}$$



Cost of a hat: \$8.99

Markup: 25%

Find 25% of 8.99 then add it to the original price.

$$(.25)(8.99) = \$2.25$$

$$8.99 \times 0.25 = 2.2475$$

$$\begin{array}{r} \$ 8.99 \\ + 2.25 \\ \hline \$ 11.24 \end{array}$$



Original price of a shirt: \$12.50

Discount: 25%

Tax: 6.5%



$$\textcircled{1} \quad (.25)(12.50) \\ = \$3.13 \text{ discount}$$

$0.25 \times 12.5 = 3.125$

$$\textcircled{2} \quad \$12.50 - 3.13 \\ = \$9.37 \text{ sale price}$$

$$\textcircled{3} \quad (0.065)(9.37) \\ = \$0.61 \text{ tax}$$

$0.065 \times 9.37 = 0.60905$

$$\textcircled{4} \quad \$9.37 \\ \textcircled{\$9.98} \text{ final price}$$

1. Find 25% of 12.50
2. Subtract it from the original to get the sale price.
3. Find 6.5% of the sale price to get the tax.
4. Add it to the sale price.

Cost of a shirt: \$52.50

Markup: 25%

Tax: 6.5%



$$\textcircled{1} \quad (.25)(52.50) \\ = \$13.13$$

$$0.25 \times 52.5 = 13.125$$

$$\textcircled{2} \quad \$52.50 + 13.13 \\ = \$65.63$$

$$\textcircled{3} \quad (.065)(65.63) \\ = \$4.27$$

$$0.065 \times 65.63 = 4.26595$$

$$\textcircled{4} \quad \begin{array}{r} \$65.63 \\ + 4.27 \\ \hline \$69.90 \end{array}$$

1. Find 25% of 52.50
2. Add it to the original price
3. Find 6.5% of the new price
4. Add it to the new price.

Cost of shorts: \$22.50

Markup: 75%

Discount: 30%

Tax: 6.375%

$$\textcircled{1} (0.75)(22.50) = \$16.88$$

$$\textcircled{2} \$16.88 + 22.50 = \$39.38$$

$$\textcircled{3} (0.30)(39.38) = \$11.81$$

$$\textcircled{4} 39.38 - 11.81 = \$27.57$$

$$\textcircled{5} (0.06375)(27.57) = \$1.76$$

$$\textcircled{6} 27.57 + 1.76 = \textcircled{\$29.33}$$



1. Find 75% of 22.50
2. Add it to the original price
3. Find 30% of the new price to get the discount
4. Subtract it from the new price to get the sale price
5. Find 6.375% of the sale price
6. Add it to the sale price

Homework
Blue WS 4

Due Today?