

I am Atul Roy

your assistant for this evening

A problem like #54 on the Review

Jill purchased 4 shirts for \$19.99 each, 2 pants for \$29.99 each, and some candies for \$.79. If the sales tax is 5%, how much was her total bill?

$$4 \text{ shirts: } 4 \times 19.99 = 79.96$$

$$2 \text{ pants: } 2 \times 29.99 = 59.98$$

$$\text{candies: } .79 = .79$$

$$\text{Total price: } \$140.73$$

$$\text{Tax @5\% } 140.73 \times .05 = 7.0365$$

Total bill:

$$\text{Price+Tax} = 140.73 + 7.04 = \$147.77$$

work on the actual #54 please

An example like #55

75% of the fruits in a fruitbasket are oranges. A fruit basket has 60 fruits. Find the number of oranges in this basket.

$$75\% \text{ of } 60 \text{ is } .75 \times 60 = 45.0 \text{ oranges}$$

Actual #55

$$70\% \text{ of } 120 \text{ is } .70 \times 120 = 84.0 \text{ multiple choice}$$

An example like #56

Alisha sold her house for \$475,000

She has to pay a commission of 6.5% to the selling agent. (proportion 0.065)

How much commission does Alisha have to pay?

How much of \$475,000 does Alisha get?

Solution:

Commission is $.065 \times 475000 = \$30875.00$

$475000 - 30875 = \$444,125$ left for Alisha

Actual #56

$7\frac{1}{2}\%$ is 7.5% is $\frac{7.5}{100} = 0.075$

$140000 \times .075 = \$10,500.00$

An example like #57

Homa is driving through a large state on a highway. She stops at a gas station, buys a pack of crackers for a price of \$2.99 and it shows a sales tax of \$0.21. What is the rate of sales tax in this state?

$$\frac{.21}{2.99} = .0702 \quad 7.02\%$$

actual #57

$$\frac{756}{12000} = 0.063$$

6.3%

An example like #58

A certain make of computer depreciates 45% in price each year. Jacob bought this computer for \$1500 one year ago. What is the price of Jacob's computer this year?

depreciation: $1500 \times .45 = 675.0$

Price now, $1500 - 675 = \$825$

Actual #58

Depreciation: $.25 \times 35000 = \$8750.0$

Price at the end of one year $35000 - 8750 = \$26,250$

An example like #59

Gail received a 12% raise this year. Gail's salary last year was \$96,500. What is Gail's salary this year?

Raise: $.12 \times 96500 = \$11580.00$

This year's salary is $96500 + 11580 = \$108,080$

Actual #59

$$80 \times .15 = 12$$

this month: $80 + 12 = 92$

An example like #60

There are 2500 residents in a community

1600 of the residents are whites, what % is this? $\frac{1600}{2500} = 0.64$ is 64%

400 of the residents are African Americans, what % is this? $\frac{400}{2500} = 0.16$ is 16%

300 of the residents are Hispanics, what % is this? $\frac{300}{2500} = 0.12$ is 12%

175 of the residents are Asians, what % is this? $\frac{175}{2500} = 0.07$ is 7%

25 of the residents are Native Americans, what % is this? $\frac{25}{2500} = 0.01$ is 1%

actual #60

$$\frac{21}{600} = 0.035 \text{ is } 3.5\%$$

$$\frac{180}{600} = 0.3 \text{ is } 30\%$$

150 are SUV, $600 - 150 = 450$ NOT SUV

percentage that is NOT SUV are

$$\frac{450}{600} = 0.75 \text{ } 75\%$$

OR do it the Kojo's way

$$\frac{150}{600} = 0.25$$

25% are SUVs

75% are NOT SUVs

An example like #41

$\left(\frac{2}{9}\right)^{th}$ of the candies in a bag are red. The bag has 180 candies. How many of these 180 are red?

$$\left(\frac{2}{9}\right) \text{ of } 180 \text{ is } \frac{2}{9} \times 180 \text{ the same as } \frac{2}{9} \times \frac{180}{1} = \frac{2 \times 180}{9 \times 1} = 40$$

40 red

Kojo's way, if the number of red candies is x

$$\left(\frac{2}{9}\right)180 = x$$

$$\frac{360}{9} = x$$

$$40 = x$$