

Notes 8-6

DAY 2 Sales Tax, Tips, Mark-ups & Discounts

Unit 8

Int 1

WARM - UP!:

1) Find 68% of 125.

.68 · 125 = 85

2) (78 is) what percent of 65?

78/65 = x/100, 7800/65 = 65x/65, 120 = x, 120%

Find the discount or tax and total price for each item (Round to the nearest cent.)

3) Shoes: \$29.95

25% off (discount = "-")

25% of \$29.95, .25 · 29.95 = 7.49

Discount: \$7.49

\$29.95 - \$7.49 =

Sales Price: \$22.46

4) A new bike: \$236

Tax: 7.4% (+)

7.4% of \$236, .074 · 236 =

Sales Tax: \$17.46

\$236 + \$17.46 =

Total Price: \$253.46

*BE CAREFUL! Sometimes it will ask for JUST THE TAX or DISCOUNT, etc., and sometimes it will ask for the TOTAL!*** (Circle what we're trying to find)

* OFF ORIGINAL PRICE *

TIP and TAX: Find the final cost.

Ex. 1) Mark got a massage for \$45. He is going to leave a tip of 15% and tax is 6.3%. What is his total cost for the massage?

original

TIP (+)

15% of 45

.15 · 45 = \$6.75

TAX (+)

6.3% of 45

.063 · 45 = \$2.84

TOTAL COST: 6.75 + 2.84 + 45 = \$54.59

Ex. 2) What is the total cost of a \$200 dress if there is 6.7% sales tax and a 15% tip.

6.7 + 15 = 21.7%

TIP & TAX (only add them when both off original price!)

21.7% of 200

.217 · 200 = \$43.40

TOTAL COST: 43.40 + 200 = \$243.40

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OFF ORIGINAL → **OFF TOTAL AFTER DISCOUNT**
DISCOUNT and TAX: Find the final cost.

Ex. 3) Joy received a coupon good for 30% off any coat. The coat she chose was marked \$83.50. The sales tax is 8%. If she uses her certificate to buy the coat, how much will it cost, including tax?

DISCOUNT (-)
 30% of 83.50
 $.3 \cdot 83.50 = \$25.05$

TAX (+)
 8% of \$58.45
 $.08 \cdot 58.45 = \$4.68$

DISCOUNTED PRICE:

$\$83.50 - 25.05 = \58.45

FINAL PRICE:

$58.45 + 4.68 = \$63.13$

Ex. 4) Stephanie works at Target. She buys headphones that cost \$27.99 and uses her employee discount of 20% and tax is 7.3%. What is her total cost for the headphones?

DISCOUNT (-)
 20% of 27.99
 $.20 \cdot 27.99 = \$5.60$

DISCOUNTED PRICE:

$27.99 - 5.60 = \$22.39$

TAX (+)

7.3% of 22.39
 $.073 \cdot 22.39 = \$1.63$

FINAL PRICE:

$22.39 + 1.63 = \$24.02$

Ex. 5) Find the percent of sales tax. Round to the hundredths place when necessary.

Method 1

A) original price: \$1,500

Total with tax: \$1,675

TAX: $1,675 - 1,500 = 175$
 (change)

$\frac{\text{change}}{\text{orig}} = \frac{\%}{100}$

$\frac{175}{1500} = \frac{x}{100}$

$\frac{17500}{1500} = \frac{1500x}{1500}$

$11.67\% = x$
 sales tax

Method 2

$\frac{\text{change}}{\text{orig}} \cdot 100$

$\frac{175}{1500} \cdot 100 = 11.67\%$
 tax

Ex. 6) Find the percent of sales tax: A bag of groceries that subtotal was \$148.73 and with tax equal \$158.84

orig: \$148.73

total with tax: \$158.84

TAX: $158.84 - 148.73 = \$10.11$
 (change)

$\frac{\$10.11}{\$148.73} \cdot 100 = 6.797\%$
 $\approx 6.8\%$ tax

