

Warm Up Gr 8

Date: _____



Find the total price including tax to buy this in NB.

$$\begin{aligned}\text{Tax}^{\$} &= 15\% \text{ of Price} \\ &= 0.15 \times \$1698 \\ &= \$254.70\end{aligned}$$

$$\begin{aligned}\text{Total w tax} &= \text{Price} + \text{tax}^{\$} \\ &= \$1698 + 254.70 \\ &= \$1952.70\end{aligned}$$

WS solutions

1. Find the amount of sales tax required in NB, for the following items:

(a) a desk \$79

(b) A Box of chocolates \$9.95

(c) a TV \$ 890.99

(d) a pair of sneakers \$129.98

$$1a) \text{ Tax} = 15\% \text{ of } \$79$$

$$= 0.15 \times \$79$$

$$= \$11.85$$

$$1b) \text{ Tax} = 15\% \text{ of } \$9.95$$

$$= 0.15 \times \$9.95$$

$$= \$1.49$$

$$1c) \text{ Tax} = 15\% \text{ of } \$890.99$$

$$= 0.15 \times \$890.99$$

$$= \$133.65$$

$$1d) \text{ Tax} = 15\% \text{ of } \$129.98$$

$$= 0.15 \times \$129.98$$

$$= \$19.50$$

Homework Solutions

- (a) a phone \$ 74.50
 (c) a T-Shirt \$ 27.45
 (e) A coat \$45.67
 (g) Furby \$64.60
 (i) Kids Snow suit \$89.99

- (b) a pair of gloves \$ 7.65
 (d) a supper \$ 12.35
 (f) sled \$ 24.99
 (h) a PVR \$ 312.15
 (j) a popcorn \$5.39

2a) Tax = 15% of \$74.50

$$= 0.15 \times \$74.5$$

$$= \$11.18$$

Total costs = Price + tax

$$= \$74.50 + \$11.18$$

$$= \$86.68$$

b) Tax = 15% of \$7.65

$$= 0.15 \times \$7.65$$

$$= \$1.15$$

Total costs = Price + tax

$$= \$7.65 + \$1.15$$

$$= \$8.80$$

c) Tax = 15% of \$27.45

$$= 0.15 \times \$27.45$$

$$= \$4.12$$

Total costs = Price + tax

$$= \$27.45 + \$4.12$$

$$= \$31.57$$

d) Tax = 15% of \$12.35

$$= 0.15 \times \$12.35$$

$$= \$1.85$$

Total costs = Price + tax

$$= \$12.35 + \$1.85$$

$$= \$14.20$$

e) Tax = 15% of \$45.67

$$= 0.15 \times \$45.67$$

$$= \$6.85$$

Total costs = Price + tax

$$= \$45.67 + \$6.85$$

$$= \$52.52$$

f) Tax = 15% of \$48.74

$$= 0.15 \times \$24.99$$

$$= \$3.75$$

Total costs = Price + tax

$$= \$24.99 + \$3.75$$

$$= \$28.74$$

g) Tax = 15% of \$64.60

$$= 0.15 \times \$64.60$$

$$= \$9.69$$

Total costs = Price + tax

$$= \$64.60 + \$9.69$$

$$= \$56.29$$

h) Tax = 15% of \$312.15

$$= 0.15 \times \$312.15$$

$$= \$46.82$$

Total costs = Price + tax

$$= \$312.15 + \$37.50$$

$$= \$358.97$$

i) Tax = 15% of \$89.99

$$= 0.15 \times \$89.99$$

$$= \$13.50$$

Total costs = Price + tax

$$= \$89.99 + \$13.50$$

$$= \$103.49$$

j) Tax = 15% of \$5.39

$$= 0.15 \times \$5.39$$

$$= \$0.81$$

Total costs = Price + tax

$$= \$5.39 + \$0.81$$

$$= \$6.28$$

Discount and Sales Price

A discount is when they reduce the amount of an item or they put an item on sale. ****Always change % to decimal before using****

$\begin{array}{l} \text{Amount SAVED} = \text{\% of discount} \times \text{Regular Price} \\ \text{or amount discounted} \quad \quad \quad \text{(Change to decimal)} \times \text{Regular Price} \end{array}$
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$\text{Sale Price} = \text{Regular Price} - \text{Amount of SAVED}$

Example 1)

A stereo regularly sells for \$149.99, but it is on sale for 20% off.

- (a) Find the amount of discount
(b) Find the sale price

(a) Amt. of Discount = Rate of discount \times Regular price

$$\begin{aligned}
 &= \text{Save \$} = 20\% \text{ off } \$149.99 \\
 &= \text{---} = \downarrow \text{change to decimal} \times \$149.99 \\
 &= 0.20 \times \$149.99 \\
 &= \$29.998 \\
 &= \$30.00
 \end{aligned}$$

- (b) Sale Price = Regular Price - Amt. of Discount

$$\begin{aligned}
 \text{Sale Price} &= \text{Price} - \text{Save\$} \\
 &= \$149.99 - \$30.00 \\
 &= \$119.99
 \end{aligned}$$

2. A jacket that regularly sells for \$72.50 is discounted by 15%. What is the sale price?

$$\begin{aligned}\text{Amount Saved} &= 15\% \text{ off } \$72.50 \\ &= 0.15 \times 72.50 \\ &= \$10.875 \\ &= \$10.88\end{aligned}$$

$$\begin{aligned}\text{Sales Price} &= \text{Price} - \text{Saved \$} \\ &= \$72.50 - \$10.88 \\ &= \$61.62\end{aligned}$$

Security Cameras Regular cost \$299.99 but are going on sale for 30% off.

- a) What is the amount saved?
- b) What is the sales price?
- c) What is the Tax on the price?
- d) What is the cost with tax?

$$\begin{aligned} \text{a) Saved \$} &= 30\% \text{ of } \$299.99 \\ &= 0.30 \times \$299.99 \\ &= \boxed{89.997} \\ &= \$90.00 \end{aligned}$$

$$\begin{aligned} \text{b) Sales Price} &= \text{Price} - \text{Saved \$} \\ &= \$299.99 - \$90.00 \\ &= \$209.99 \end{aligned}$$

$$\begin{aligned} \text{c) Tax} &= 15\% \text{ of } 209.99 \\ &= 0.15 \times 209.99 \\ &= \$31.50 \end{aligned}$$

$$\begin{aligned} \text{d) cost w tax} &= 209.99 + 31.50 \\ &= \$241.49 \end{aligned}$$

200
No tax
Pay \$200

15% off
 $0.15 \times 200 = 30$
Sale Price = $200 - 30 = \$170$
Tax = 15% of 170
= 25.50
Cost w tax = $170 + 25.50$
= 195.50

You try

Ex 2) A movie is regularly \$19.99. If it goes on sale for 8% off then what is sales price? (Show all work)

$$\begin{aligned}\text{Save \$} &= 8\% \text{ off } 19.99 \\ &\quad \downarrow \div 100 \\ &= 0.08 \times 19.99 \\ &= \$1.60\end{aligned}$$

$$\begin{aligned}\text{Sales Price} &= \text{Price} - \text{Saved \$} \\ &= 19.99 - 1.60 \\ &= \$18.39\end{aligned}$$

Homework Sheet 247 # 1, 2, 3

$$\begin{aligned} \text{Discount} &= \text{Saved} = \% \times \text{Price} \\ \text{Sales Price} &= \text{Price} - \text{Saved} \end{aligned}$$

1. Calculate the sale price if you have 30% off of \$29.99

- 2) For each of the following calculate the discount only.

1. 40% off 9.98 b. 96% off \$5 c. 1% off \$17.60 d. 10% off \$19.95
e. 5% off 3.25

- f. 20% off \$87.49 g. 29% off \$1500 h. 33.3% off \$15

- 3) A \$7.99 t-shirt is on sale for 50% off. Fred buys 6 t-shirts how much does he save?