



WARM UP GRADE 8

Feb. 28, 2018



Quiz Tomorrow

1) The cost of new LG 55" Smart Tv is \$898. It was marked down by 18% in February and now marked down another 10% in March.

a) What is the new sales price?

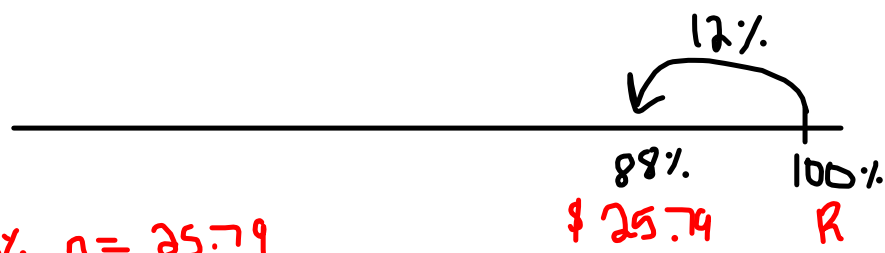
$$\begin{aligned} \text{Amount Saved} &= 18\% \text{ of } 898 \\ &= 0.18 \times 898 \\ &= 161.64 \end{aligned}$$

b) What is the price with tax in March? Price in Feb = $898 - 161.64$

$$= \$736.36$$

$$\begin{aligned} \text{Amount saved in Mar} &= 10\% \text{ of } 736.36 \\ &= 0.10 \times 73.63 \end{aligned}$$

2) A box of diapers are on sale for \$25.79 which is 12% off Regular Price. What is Regular Price?



$$88\% \cdot n = 25.79$$

$$0.88n = 25.79$$

$$\frac{0.88n}{0.88} = \frac{25.79}{0.88}$$

$$n = \$29.31$$

$$8. (i) \text{ a) Discount } \quad 20\% \text{ of } 89.99 \\ 0.2 \times 89.99 \\ 18$$

$$b) \text{ Sale Price} = \text{Reg} - \text{Disc} \\ = 89.99 - 18 \\ = 71.99$$

$$c) \text{ HST} \quad 15\% \text{ of } 71.99 \\ 0.15 \times 71.99 \\ 10.80$$

$$\text{Total Cost} = \text{Price} + \text{tax} \\ 71.99 + 10.80 \\ 82.79$$

$$(ii) \text{ Disc} \quad 45\% \text{ of } 120 \\ 0.45 \times 120 \\ 54$$

$$\text{Sale Price} = \text{Price} - \text{Disc} \\ = 120 - 54 \\ = 66$$

$$\text{HST} \quad 15\% \text{ of } 66 \\ 0.15 \times 66 \\ 9.90$$

$$\text{Total Cost} = \text{Price} + \text{tax} \\ = 66 + 9.90 \\ = 75.90$$

$$\begin{aligned} 11. \text{ Amt of Dec} &= 18.98 - 11.39 \\ &= 7.59 \end{aligned}$$

$$\begin{aligned} \% \text{ Dec} &= \frac{\text{Amt of Dec}}{\text{Orig Amt}} \times 100\% \\ &= \frac{7.59}{18.98} \times 100\% \\ &= 0.40 \times 100\% \\ &= 40\% \end{aligned}$$

$$b) \text{ Sale Price } 11.39$$

$$\begin{aligned} \text{HST} &= 15\% \text{ of } 11.39 \\ &= 0.15 \times 11.39 \\ &= 1.71 \end{aligned}$$

$$\begin{aligned} \text{Total Cost} &= 11.39 + 1.71 \\ &= \$ 13.10 \end{aligned}$$

$$Q. \frac{1}{2} \text{ of } 30 = \$15$$

$$\begin{array}{l} \text{1st Disc} \quad 25\% \text{ of } 30 \\ \quad \quad \quad 0.25 \times 30 \\ \quad \quad \quad 7.50 \end{array}$$

$$\begin{array}{l} \text{Sale Price} \quad 30 - 7.50 \\ \quad \quad \quad 22.50 \end{array}$$

$$\begin{array}{l} \text{2nd Disc} \quad 25\% \text{ of } 22.50 \\ \quad \quad \quad 0.25 \times 22.50 \\ \quad \quad \quad 5.63 \end{array}$$

$$\begin{array}{l} \text{New Sale} \\ \text{Price} \quad 22.50 - 5.63 \\ \quad \quad \quad 16.87 \end{array}$$

So NO the T-shirt is not 50% off,
if it was 50% off, it would be \$15,
not \$16.87

$$14. \quad 15\% \text{ Disc} \quad \text{Disc} = 0.15 \times 129.99 \\ = 19.50$$

$$\text{Sale Price} = 129.99 - 19.50 \\ = 110.49$$

$$\begin{array}{l} \text{HST} \quad 15\% \text{ of } 113.09 \\ 0.15 \times 113.09 \\ 16.96 \\ \text{Sale Price with taxes} \quad 113.09 + 16.96 \\ 130.05 \end{array}$$

$$\text{Price without taxes} \quad 129.99$$

It is better to get a 15% discount than it is to have no taxes, because you pay the taxes on a lower amount.

% of reg price = amt of disc

$$15. \quad 33\% \text{ of reg price is } 28.38 \\ 0.33n = 28.38 \\ \frac{0.33n}{0.33} = \frac{28.38}{0.33} \\ n = 86.$$

The regular price was 86.

$$b) \text{ Sale Price} \quad 86 - 28.38 \\ 57.62$$

$$\text{HST} \quad 15\% \text{ of } 57.62 \\ 8.64$$

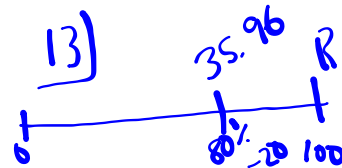
$$\text{Total Cost} \quad 57.62 + 8.64 \\ 66.26$$

Class/Homework

Quiz Tomorrow

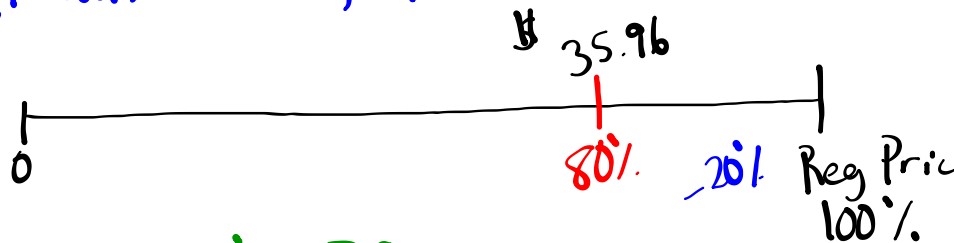
Always use 15%

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8ii, 1, 13, 15 16 80% of R = 35.96

13) During a 20% off sale, the sales price of an MP3 alarm clock was \$35.96. What was the reg price of the radio?



80% of Reg is 35.96
 $0.80 \times R = 35.96$

$$\frac{0.80 R}{0.80} = \frac{35.96}{0.80}$$

$R = \$44.95$

The Regular Price of MP3 player is \$44.95

$$15) \quad 67\% \text{ of Reg Price} = 28 - 38$$

$$\begin{aligned} 11a) \quad \% \text{ dec} &= \frac{\text{Diff}}{\text{orig}} \times 100 \quad \% \\ &= \frac{\text{Big} - \text{Small}}{\text{original}} \times 100 \quad \% \\ &= \frac{18.98 - 11.39}{18.98} \times 100 \quad \% \\ &= \frac{7.58}{18.98} \times 100 \quad \% \\ &= \end{aligned}$$