1. What is 24% of $560 ?

Solution—

100% of it equals $560.00.

  1% of it equals    5.60.

 24% of it equals 24 times 1%    or   .24 × $5.60 = $134.40.

$5.60 × 24 equals $134.40.

2. What is 35% of 177 pounds ?

3. What is 42% of 864 ? 962 ?

4. A jobber having 2160 bags of coffee, sold at one time 8⅓%, at another 25% of what remained, and at a third, sold 33⅓% of what still remained. Find the value of what was still left at $18 per bag.

5. A farmer having 156 sheep to shear, agreed to pay for their shearing 4% of the sum received for their sale. If the fleeces average 7½ lb. each, and are sold at 30c. per pound, how much was paid for the shearing ?

6. A dealer having bought 240 doz. eggs at 25c. per dozen, sold 8⅓% of them at cost and the remainder at 27c. per dozen. What was his profit ?

7. A farmer having raised 1240 bu. wheat, used 5% of it for seed and 5% of it for bread. He then sold to one man 33⅓% of the remainder at $1 per bushel, and to another 25% of what still remained at $1.10 per bushel. How much was received from both sales, and how many bushels were left unsold ?

8. A man owning an estate of $200,000 bequeathed 10% of it to a college, 10% of the remainder to a church, and divided what still remained equally among his four children. What did each child receive ?

Example—Goods are invoiced at $640, with discounts of 25, 10, and 5% off. Find cost of goods ?

Solution—

$$\begin{array}{l} \$640 \\ \underline{\phantom{00}160} = 25\% \text{ of } \$640 \\[4pt] \$480 \\ \underline{\phantom{000}48} = 10\% \text{ of } \$480 \\[4pt] \$432 \\ \underline{\phantom{00}21.60} = 5\% \text{ of } \$432 \\[4pt] \$410.40 = \text{Net price.} \end{array}$$

The order in which the discounts of any series are considered is not material, a series of 25%, 15%, and 10% being the same as one of 15%, 10%, and 25%, or 10%, 25%, and 15%.

Example—What single discount is equivalent to 25%, 20% and 5% off ?

Solution—                OR

1.00               1.00   1.00   1.00

 .25 = 25% of 1.00    .25    .20    .05

 .75 = Net after first discount.   .75 × .80 × .95 = .57

 .15 = 20% of .75        1.00 − .57 = .43

 .60 = Net after 2d discount.

 .03 = 5% of .60.

 .57 = Net after 3d discount.

1.00 − .57 = .43, or 43%, the single discount.

Find the net amount of the following bills :

9. $1550 less 33⅓% and 20%.

10. $840 less 25% and 10%.

11. $3500 less 20% and 14⅜%.

12. $395 less 20% and 20%.

13. A wholesale dealer offers cloth at $2.40 per yard subject to a discount of 25%, 20% and 5%. How many yards can be bought for $492.48 ?

14. Find the net price of two tons of fence wire listed at 3c. per pound and sold 20% and 25% off.