

a pound of tea ; find the price of a pound of each.

ANS. Tea, 55 cents ; coffee, 35 cents.

2. A farmer sold 3,240 pounds of wheat and 952 pounds of oats for \$54.40 ; the wheat is worth 40 cents a bushel more than the oats ; find the value of each per bushel.

ANS. Wheat, 80 cents ; oats, 40 cents.

3. A man buys land at \$64 50 an acre. If he sells $\frac{1}{4}$ of it to A at \$65 an acre, $\frac{1}{5}$ of the remainder to B at \$48 for $\frac{3}{4}$ of an acre, and the remainder which is 108 acres to C at the rate of \$36 for $\frac{4}{7}$ of an acre, find his gain or loss.

ANS. Loss \$153.

4. A man buys land at \$80 an acre. If he sells $\frac{1}{4}$ of it to A at \$60 an acre, $\frac{1}{4}$ of the remainder to B at \$25 for $\frac{1}{5}$ of an acre, and the rest to C, which is 144 acres at \$50 for $\frac{2}{5}$ of an acre, what is his gain or loss ?

ANS. Loss \$7,360.

5. If 4 men or 5 boys can do $\frac{3}{4}$ of a piece of work in 24 days, in what time can 3 men and 15 boys do the rest ?

ANS. 2 2-15 days.

6. 7 men or 9 boys can do a piece of work in $21\frac{2}{3}$ hours, in what time would 9 men and 7 boys do the remainder ?

ANS. $10\frac{1}{2}$ hours.

7. A train running 40 miles an hour takes 18 seconds to cross a bridge 64 yards long ; what is the length of the train ?

ANS. 256 yards.

8. If a train running at the rate of 30 miles an hour crosses a bridge 150 yards long in 24 seconds, find the length of the train ?

ANS. 202 yards.

9. A train 20 rods long overtakes a man walking at the rate of 4 miles

an hour and passes him in 10 seconds, how many miles an hour is the train running ?

ANS. $26\frac{1}{2}$ miles.

10. A train 220 yards long overtakes a man walking at the rate of 3 miles an hour and passes him in 15 seconds, find the number of miles per hour the train is running.

ANS. 33 miles.

11. Twelve months' wages are \$380 and a watch, at the same rate 10 months' wages are \$310 and a watch, find the value of the watch.

ANS. \$40.

12. A servant agrees to work a year for \$128 and a suit of clothes, but leaving at the end of nine months he gets \$92 and the suit ; what was the value of the suit ?

ANS. \$16.

13. A grocer mixes two kinds of tea, worth respectively 45 and 55 cts. per lb., in the proportion of 3 lbs. of the cheaper to 2 lbs. of the dearer, and sells the mixture at 56 cts. a lb. ; find his gain per cent.

ANS. 14 2-7 per cent.

14. 5 gallons of wine worth \$3.20 a gallon are mixed with 3 gallons at \$4.80 a gallon, and the mixture is sold at \$4.75 a gallon ; find the gain per cent.

ANS. 25 per cent.

15. A plate of copper 2 ft. 3 in. long, 8 in. wide and $\frac{3}{8}$ of an in. thick, is rolled into a sheet 2 ft. 8 in. long, and 6 in. wide ; find its thickness.

ANS. $\frac{3}{4}$ inch.

16. A cube of gold, 2 inches to the side, is rolled into a sheet 3 ft. 4 in. long and 3 in. wide ; how thick is it ?

ANS. 1-15 inch.

17. Trees are planted 10 ft. apart around the sides of a rectangular field