12. What is the interest of $510 for 1 year, at 20 per cent.?

13. What is the interest of $750 for 1 year, at 24 per cent.?

14. A man paid $120 for a waggon and sold it, at a gain of 30 per cent.; how much was his gain?

SOLUTION.—If he gained 30 per cent. he gained $\frac{30}{100}$, or $\frac{3}{10}$ of the cost. $\frac{3}{10}$ of $120 is $36, the gain.

15. A tailor sold a coat that cost him $25 at a gain of 32 per cent.; how much did he gain?

16. A man sold a quantity of goods that cost him $840, at a gain of 75 per cent.; how much did he gain?

17. Edward spent 85 per cent. of $120 for a suit of clothes. How much did his clothes cost him.

18. Henry's watch cost $180, he sold it at a loss of 15 per cent.; how much did he receive for it?

19. A boy sold a quantity of candies that cost him 50 cents, at a gain of 120 per cent.; how much did he receive for them?

20. Jacob sold a horse that cost him $240, at a loss of 25 per cent.; how much did he receive for the horse?

Lesson III.

REMARK.—The principal or cost is always 100 per cent.

1. If $\frac{3}{50}$ of the principal equals the interest, what is the rate per cent.

SOLUTION 1ST.—If $\frac{3}{50}$ of the principal equals the interest, the rate per cent. is $\frac{3}{50}$ of 100 per cent., which is 6 per cent.

SOLUTION 2D.—If the interest of 1 cent is $\frac{3}{50}$ of a cent, the interest of 100 cents is 100 times $\frac{3}{50}$, or $\frac{300}{50}$, or 6 cents. Therefore, it is 6 per cent.

2. If $\frac{1}{50}$ of the principal equals the interest, what is the rate per cent.?

3. If $\frac{2}{25}$ of the principal equals the interest, what is the rate per cent.?