9. A horse was sold for $90, which was 10 per cent. less than its value; what would have been the gain per cent. if it had been sold for $120?

10. A farm was sold for $690, which was 8 per cent. less than its value; what would have been the gain per cent. if it had been sold for $850?

11. A book was sold for 90 cents, which was 10 per cent. less than its value; what would have been the gain per cent. if it had been sold for $1.50?

12. A man sold two watches, at $12 each; on one he gained 50 per cent., and on the other he lost 50 per cent. Did he gain or lose by the bargain, and how much?

13. An individual sold two gold pencils, at $6 apiece; on one he gained 20 per cent., and on the other he lost 20 per cent. Did he gain or lose, and how much?

14. A farmer sold two horses at $210 apiece; for one he received 25 per cent. more than its value, and for the other 25 per cent. less than its value. Did he gain or lose by the bargain. and how much?

15. A merchant sold a quantity of cloth for $280, and by so doing lost 60 per cent.; he then sold another quantity for $80, and thereby gained 60 per cent. Did he gain or lose by the operation, and how much?

Lesson XVII.

1. An individual was ordered to collect $190, and his own fee, which is to be 5 per cent. on all the money collected. How much should he receive?

Solution.—He is to receive 5 per cent., or $\frac{5}{100}$ or $\frac{1}{20}$ of all he collects. $\frac{20}{20}$, all he collects, minus $\frac{1}{20}$, his fee, equals $\frac{19}{20}$ of all he collects, or $190, the amount he is to pay his employer. If $\frac{19}{20}$ of what he collects equals $190, $\frac{1}{20}$ is $\frac{1}{19}$ of $190, which