

21. What is the present worth of \$186, due $4\frac{1}{3}$ years hence, at 5 per cent. ?

22. What is the present worth of \$66, due $5\frac{1}{3}$ years hence, at 6 per cent. ?

23. What is the present worth of \$128, due $4\frac{2}{3}$ years hence, at 6 per cent. ?

Lesson XVI.

1. If I sell cloth, at \$2.50 a yard, and thereby gain 25 per cent. ; what did it cost a yard ?

SOLUTION.—If I gain 25 per cent. I gain $\frac{1}{4}$ of the cost ; to which add $\frac{1}{4}$, the cost, and I have $\frac{5}{4}$ of the cost equal to \$2.50. If $\frac{5}{4}$ of what I gave for it, is \$2.50, $\frac{1}{4}$ of the cost is $\frac{1}{5}$ of \$2.50, of 50 cents ; and $\frac{4}{5}$ (the cost) is 4 times 50 cents, which are 200 cents, or \$2.

2. A horse was sold for \$38, which was at a loss of 5 per cent. What did the horse cost ?

3. If I sell cloth, at \$2.50 a yard, and thereby gain 25 per cent., how must I sell it a yard, to lose 20 per cent. ?

4. If I sell cloth, at \$4.40 a yard, and thereby gain 10 per cent., how ought I to sell it, to lose 25 per cent. ?

5. If by selling a piece of cloth for \$46, I gain 15 per cent., how ought I to have sold it, to have lost 30 per cent. ?

6. A sold his horse for \$105, and thereby gained 5 per cent. on the cost ; for what ought he to have sold it, to have lost 10 per cent. ?

7. A farm was sold for \$495, which was 10 per cent. less than what it was worth ; for what ought it to have been sold, to have received 40 per cent. more than its value ?

8. A mechanic lost 20 per cent. on the cost of a waggon, by selling it for \$40 ; for what ought it to have been sold, to have gained 30 per cent. ?