Fifth Class—10.

1 A and B engage in trade, A puts in $800 and B $600. At the end of 6mos. A puts in $400 more and at the end of 8mos. B puts in $500 more. At the end of the year their assets are $3000; find A's share of the gain. 396\frac{12}{54}$—Ans.

2 Simplify $\dfrac{\sqrt{(1-\frac{7}{10})}\ \ \sqrt{(2-1\frac{13}{49})}}{\sqrt{(1-\frac{9}{25})}\ \ \sqrt{(2-\frac{40}{121})}}$　$\frac{315}{352}$—Ans.

3 A man bought a number of sheep for $1800; he sold $\frac{2}{3}$ of them at $7 apiece, gaining $16\frac{2}{3}$ per cent of what they cost. How many sheep did he buy? 300sheep—Ans.

4 When gold is quoted at 110; what is the value in gold of $100 in greenbacks? 90\frac{10}{11}$—Ans.

5 A man buys a house to be paid for as follows : $\frac{1}{5}$ down, and $\frac{1}{5}$ every four months until the whole is paid. When might the whole be paid at once? 8mos.—Ans.

6 Find the number of acres in a rectangular field whose perimeter is 480 rods and whose length is five times its width. 50acres—Ans.

Fifth Class - 11.

1 What is the present worth of a note of $20, payable in 1 year at 6 per cent discount? 18.86\frac{12}{53}$—Ans.

2 If a certain number be increased by $\frac{1}{2}$ of its square the sum will be 220, but if it be increased by $\frac{1}{5}$ of its square the sum will be 100; find the number. 20—Ans.

3 The cube root of the square of a number is 16; find the number. 64—Ans.

4 A man sold his farm for 20 per cent more than 90 per cent of what it cost, and gained $800; find the cost of the farm. $10000—Ans.