

6 What quantities of tea at 45 and 60cts. per pound, must be mixed together so that the mixture may be worth 48cts. per pound. 3lbs. at 60cts., 12lbs. at 45cts.—Ans.

Fifth Class—13.

1 The state of a railway company's affairs would justify a dividend of 4 per cent but for the fact that \$1500000 of the stock consists of preference shares which are guaranteed a half-yearly dividend of $2\frac{1}{2}$ per cent. The ordinary shareholders receive only $1\frac{1}{2}$ per cent half-yearly; what is the whole amount of stock? \$3000000 Stock—Ans.

2 If 10bus. of wheat be worth 20bus. of peas, and 5 bus. of peas be worth 10bus. of oats, and 20bus. of oats be worth 15bus. of barley, how many bus. of barley are worth 200bus. of wheat? 600bus.—Ans.

3 A person sold 50bus. of grain for \$42, some at 77 cents per bus. and the remainder at $94\frac{1}{2}$ cts. per bus.; he gained 10 per cent on the first kind and 5 per cent on the second. Find the entire gain. \$3—Ans.

4 If 10men, 12women, 15boys or 20girls, can perform a piece of work in 30days; how long will it take 2men, 2women, 2boys and 2girls to do the same work? 50days—Ans.

5 In what time will \$300 triple itself at 10 per cent, simple interest? 20yrs.—Ans.

6 Find the diagonal of a rectangle whose area is $7\frac{1}{2}$ acres and whose base is $1\frac{1}{3}$ times its perpendicular. 50 rods—Ans.

Fifth Class—14.

1 The minute hand of a clock moves 6 per cent too fast and the hour hand 5 per cent too slow. The hour