5. To a certain number $\frac{3}{8}$ of itself is added : **what** part must be subtracted from the sum to get the number ?

6. How does the numerator of the part subtracted, compare with the numerator of what is added ?

7. How does the denominator of what is taken off compare with the numerator and the denominator of what is added ?

8. What per cent. taken from a number is equal to 40 per cent. of the remainder ?

> *Sol.*—Rem. + 40 per cent. of rem. = 140 per cent. of rem. = $\frac{7}{5}$ of rem. = given number
> ∴ rem.= $\frac{5}{7}$ of given number, and $\frac{2}{7}$ or $28\frac{4}{7}$ per cent. must have been taken off.

9. What per cent. subtracted from a number **is** equal to 25 per cent. of the remainder ?

10. 30 per cent. is added to a number : what per cent. must be taken from the sum to give the original number ?

11. When $12\frac{1}{2}$ per cent. is added, what per cent. subtracted will give the number that was increased ?

12. 40 is 8 per cent. of what ?

> *Sol.*—8 per cent. = $\frac{8}{100}$ of it = 40 ∴ $\frac{1}{100}$=5, and number=500.

13. If I take off $\frac{1}{5}$ of my price when selling an article, what per cent. of my price is left ?

14. If I ask 96 cts. for a book and take off $12\frac{1}{2}$ per cent., how much do I get for it ?

15. What per cent. must I add to the price of an article, so that when I take off 10 per cent. for a customer I may neither lose nor gain ?