8.) There are two class rooms A and B. If 10 students are sent from A to B the number of

students in each room becomes equal. But if 20 students are sent from B to A then the

number of students in A becomes double of the number of students in B.

solution-

let the students in classrooms A and B be x and y respectively.

Acc to the 1st condition;

x-10=y+10

x-y=20-----(i)

acc to 2nd condition;

x=2(y-20)

x-2y=-40---(ii)

subtracting (ii) from (i);

x-y=20

x-2y=-40

(-) (+) (+)

-------------

y=60

since;

x-y=20(from(i));

x-60=20

x=80

therefore there are 80 students and 60 students in classrooms A and B respectively.