



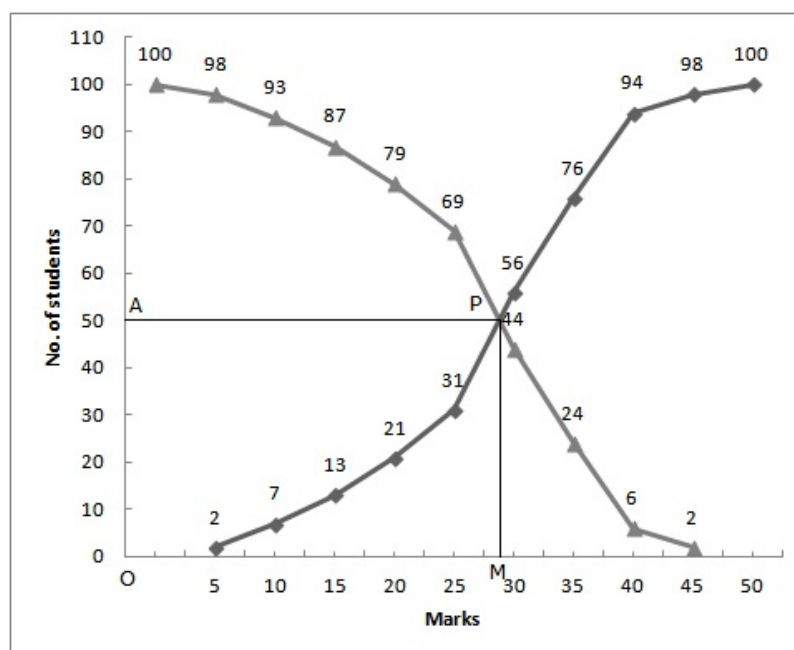
Exercise 9E

Question 6:

(i) Less than series:

Marks	Number of Students
Less than 5	2
Less than 10	7
Less than 15	13
Less than 20	21
Less than 25	31
Less than 30	56
Less than 35	76
Less than 40	94
Less than 45	98
Less than 50	100

Plot the points (5, 2), (10, 7), (15, 13), (20, 21), (25, 31), (30, 56), (35, 76), (40, 94), (45, 98) and (50, 100)



Join these points free hand to get the curve representing "less than" cumulative curve.

(ii) From the given table we may prepare the 'more than' series as shown below

Marks	Number of Students
More than 45	2
More than 40	6
More than 35	24
More than 30	44
More than 25	69
More than 20	79
	87
More than 15	93
More than 10	98
More than 5	100
More than 0	

Now, on the same graph paper as above, we plot the point (0, 100), (5, 98), (10, 93), (15, 87), (20, 79), (25, 69), (30, 44), (35, 24) and (40, 6) and (45, 2). Plot the points (5, 2), (10, 7), (15, 13), (20, 21), (25, 31), (30, 56), (35, 76), (40, 94), (45, 98) and (50, 100).

Join these points free hand to get required curve.

Here $N = 100$, $N/2 = 50$

Two curves intersect at point P(28, 50)

Hence, the median = 28

***** END *****