Exercise 9E

Question 7:
We may prepare less than series and more than series
(i) Less than series

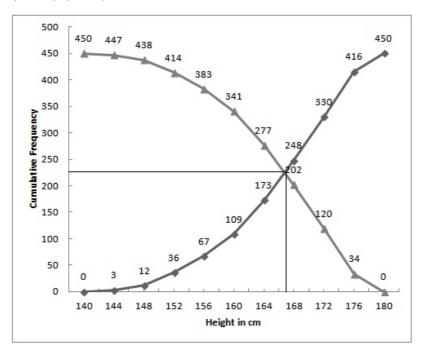| Height in (cm)	Frequency
Less than 140	0
Less than 144	3
Less than 148	12
Less than 152	36
Less than 156	67
Less than 160	109
Less than 164	173
Less than 168	248
Less than 172	330
Less than 176	416
Less than 180	450

Now on graph paper plot the points (140, 0), (144, 3), (148, 12), (152, 36), (156, 67), (160, 109), (164, 173), (168, 248), (172, 330), (176, 416), (180, 450)

(ii) More than series

Height in (cm)	C.F.

More than 140	450
More than 144	447
More than 148	438
More than 152	414
More than 156	383
More than 160	341
More than 164	277
More than 168	202
More than 172	120
More than 176	34
More than 180	0

Now on the same graph plot the points (140, 450), (144, 447), (148, 438), (152, 414), (156, 383), (160, 341), (164, 277), (168, 202), (172, 120), (176, 34), (180, 0)

The curves intersect at (167, 225).
Hence, 167 is the median.

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