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 19/ENC09/003 Demamabul f Astromedica

1) Group D

X	F	f _x	x - \bar{x}	f
3	0	0	14.8	0
8	7	56	9.8	672
13	10	130	4.8	280
18	2	36	0.2	0
23	1	23	5.2	27
28	5	140	10.2	52
33	4	132	15.2	92
	29	517		273

$$= \frac{\sum fx}{\sum f} = \frac{517}{29} = 17.8$$

$$= \sqrt{\frac{\sum f(x - \bar{x})^2}{\sum f - 1}} = \sqrt{\frac{237446}{29 - 1}}$$

$$= \sqrt{\frac{237416}{28}} = \sqrt{84.79}$$

$$= 9.211$$

$$= \frac{92}{178} \times 100 = 51.7$$

F	f _x	x - \bar{x}	x - \bar{x} ²	f
2	6	17.14	293.796	58
4	32	12.14	147.396	58
7	91	7.14	50.976	35
20	360	2.14	4.596	91
16	368	2.86	8.176	130
10	290	7.86	61.776	61
4	132	12.86	165.396	61
63	1289			30

$$\frac{\sum f^2}{\sum f} = \frac{1269}{63} = 20.14$$

$$= \frac{\sum f(x - \bar{x})^2}{\sum f - 1} = \frac{3035}{63}$$

$$= \frac{3035.714}{62} = 48.96$$

$$= 6.9971$$

$$= \frac{7}{204} \times 100 = 3.43$$

Group B has less Variance than group A