

GROUP A

C	F	x	fx	$(x - \bar{x})'$	$(x - \bar{x})^2$	$f(x - \bar{x})^2$
1-5	0	3	0	-17.05	290.7025	0
6-10	7	8	56	-12.05	145.2025	1016.4175
11-15	10	13	130	-7.05	49.7025	497.028
16-20	2	18	36	-2.05	4.2025	8.405
21-25	1	23	23	2.95	8.7025	8.7028
26-30	5	28	140	7.95	63.2025	316.0128
31-35	9	33	297	12.95	167.7025	1509.3228
						<u>3355.885</u>

i Mean =  $\frac{\sum fx}{\sum f} = \frac{682}{34} = 20.05$

ii Standard Deviation =  $\frac{\sqrt{\sum f(x - \bar{x})^2}}{\sum f} = \sqrt{\frac{3355.885}{34}} = \sqrt{98.7028} = 9.9349$

iii Coefficient of Variation =  $\frac{SD \times 100}{Mean} = \frac{9.9349 \times 100}{20.05} = 49.55$

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C	F	x	fx	$(x - \bar{x})$	$(x - \bar{x})^2$	Plan
1-5	2	3	6	-17.14	293.7796	<del>91.62</del>
6-10	4	8	32	-12.14	147.3796	<del>381.539</del>
11-15	7	13	91	-7.14	50.9796	2889.81
16-20	20	18	360	-2.14	4.5796	356.85
21-25	16	23	368	2.86	8.1796	91.69
26-30	10	28	280	7.86	61.7796	130.87
31-35	4	33	132	12.86	165.3796	617.79
	<u>63</u>		<u>1269</u>			<u>661.5</u>
						3035.7

$$\text{Mean} = \frac{1269}{63} = 20.14$$

$$\begin{aligned} \text{Standard Deviation} &= \sqrt{\frac{\sum f(x - \bar{x})^2}{\sum f}} \\ &= \sqrt{\frac{3035.7148}{63}} \\ &= \sqrt{48.1859} \\ &= 6.94 \end{aligned}$$

$$\text{Coefficient of Variation} = \frac{\text{S.D}}{\text{Mean}} \times 100 = \frac{6.94}{20.14} \times 100$$

} Group B has a less variable  $\approx 34.46$  distribution