4) $\cos 60° = \frac{1}{2}$ ¼ → $\sin 45° = \frac{\sqrt{2}}{2}$ ¼

$68° + 22°$ are complementary angles (their sum equals 90°) ¼

So, $\tan 68° \times \tan 22° = 1$ ($\tan\alpha \times \tan\beta = 1$ iff $\alpha + \beta = 90°$) ¼

Then $A = \frac{2(\cos 60° + \sin 45°)}{\tan 68° \times \tan 22°} \times (\sqrt{6} - \sqrt{3}) = \frac{2((\frac{1}{2}) + \frac{\sqrt{2}}{2})}{1}(\sqrt{6} - \sqrt{3})$ ¼

$= (1 + \sqrt{2})(\sqrt{6} - \sqrt{3})$

$A = \sqrt{3}$ ¼

Now, $A \times B = \sqrt{3} \times \frac{\sqrt{3}}{3}$

$= 1$ ¼

Thus, A & B are reciprocal of each other ¼

3rd ex:

1) population: family. ¼

The character: Monthly expenses ¼

The Modalities are: Food, transportation, housing, clothing, energy; schooling & entertainment ¼

¼ Nature: is qualitative since it can't be measured.

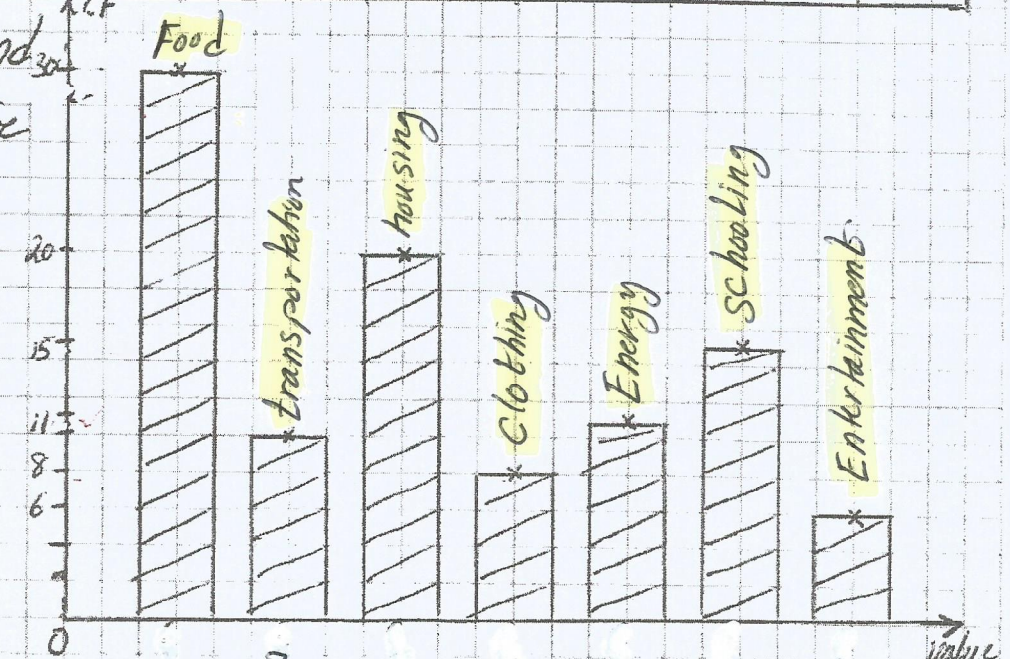
2)

Monthly expenses	Food	transportation	housing	clothing	energy	Sc. fees	Ent.	Total
Frequency	525000	$\frac{10 \times 1750000}{100} = 175\,000$	350 000	140 000	192500	210000	105 000	1750000
% F	30	10	20	8	11	15	6	100%

¾ each

3) NO, we can't find

1) I. Cumulative frequencies since variable is qualitative



¾