

Assignment-5

Evaluate consumer indices relative to one another.

Age	Percent of total minimum Purchase	Percent of total Population	Index
10-19	12%	8%	150
20-29	17%	8%	213
30-39	15%	14%	107
40-49	14%	15%	93
50-59	10%	16%	63
60-69	14%	15%	93
70-79	12%	13%	92
80-89	6%	11%	55

Formula

$$\frac{\text{customer index}}{\text{index}} = \frac{\% \text{ of Purchases}}{\% \text{ of Population}} \times 100$$

$$CI = 12/8 \times 100$$

$$= 1.5 \times 100$$

$$= 150$$

$$CI = 17/8 \times 100$$

$$= 2.125 \times 100$$

$$= 213$$

$$\begin{aligned}
 CI &= 15/14 \times 100 \\
 &= 1.07 \times 100 \\
 &= 107
 \end{aligned}$$

$$\begin{aligned}
 CI &= 14/15 \times 100 \\
 &= 0.93 \times 100 \\
 &= 93
 \end{aligned}$$

$$\begin{aligned}
 CI &= 10/16 \times 100 \\
 &= 0.625 \times 100 \\
 &= 63
 \end{aligned}$$

$$\begin{aligned}
 CI &= 14/15 \times 100 \\
 &= 0.93 \times 100 \\
 &= 93
 \end{aligned}$$

$$\begin{aligned}
 CI &= 12/13 \times 100 \\
 &= 0.92 \times 100 \\
 &= 92
 \end{aligned}$$

$$\begin{aligned}
 CI &= 6/11 \times 100 \\
 &= 0.545 \times 100 \\
 &= 55
 \end{aligned}$$

5.22