

Harmonic Mean.

The harmonic mean of n items x_1, x_2, \dots, x_n is defined as
$$\text{H.M.} = \frac{n}{\frac{1}{x_1} + \frac{1}{x_2} + \dots + \frac{1}{x_n}}.$$

If the frequency distribution is $f_1, f_2, f_3, \dots, f_n$ respectively, then
$$\text{H.M.} = \frac{f_1 + f_2 + f_3 + \dots + f_n}{\left(\frac{f_1}{x_1} + \frac{f_2}{x_2} + \dots + \frac{f_n}{x_n} \right)}$$

Note: A.M. gives more weightage to larger values whereas G.M. and H.M. give more weightage to smaller values.