

# Estimating and Approximating the Total $\pi$ -Electron Energy of Benzenoid Hydrocarbons

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Lower and upper bounds as well as approximate formulas for the total  $\pi$ -electron energy ( $E$ ) of benzenoid hydrocarbons are deduced, depending only on the number of carbon atoms ( $n$ ) and number of carbon-carbon bonds ( $m$ ). These are better than the several previously known  $(n, m)$ -type estimates and approximations for  $E$ .

*Key words:* Total  $\pi$ -Electron Energy; Benzenoid Hydrocarbons.