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Part A:

a: Jaguar average CPI = 3.6
Jaguar average MIPS = $\frac{1}{CPI} \cdot \frac{\text{Clock Rate}}{10^6}$.
= 208.33 MIPS

b: Jaguar EE average CPI = 4.4
Jaguar EE average MIPS = $\frac{1}{CPI} \cdot \frac{\text{Clock Rate}}{10^6}$
= 340.90 MIPS

C: Jaguar: $3.6 * \frac{1}{750 \times 10^6} = 4.8 \times 10^{-9}$
Jaguar EE: $4.4 * \frac{1}{1.5 \times 10^9} = 2.933 \times 10^{-9}$
$4.8 \times 10^{-9} / 2.933 \times 10^{-9} =$ [Jaguar EE is 1.64 times faster]

D: Jaguar EC = $\frac{1}{5} \sum_{i=1}^{5}$ JaguarCPI * Frequency * Jaguar EC
= 2.91 CPI

E: $2.91 \times \frac{1}{750 \times 10^6} = 3.88 \times 10^{-9}$ = Jaguar EC
4.8×10^{-9} = Jaguar
$4.8 / 3.88 =$ [Jaguar EC is 1.23 times faster]

Part B: Jaguar EE CPI = 3.54
$\frac{3.54}{1.5 \times 10^9} = 2.39 \times 10^{-9} \rightarrow 4.8 / 2.39 =$ [2 times Faster]