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$$P = 2000 \quad R = 10\% \quad n = 2 \text{ yrs} \quad A_2 = ?$$

a) $CP = 1$

$$\Rightarrow A_n = P \left[\left(1 + \frac{R}{100} \right)^n \right]$$

$$= 2000 \left[1 + \frac{10}{100} \right]^2$$

$$= 2000 (1.1)^2 = \underline{\underline{2420}}$$

b) Semi-annually $\Rightarrow CP = 2$

$$\Rightarrow n = 2 \times 2 = 4$$

$$R = \frac{10}{200} = 0.05$$

$$A_2 = 2000 [1.05]^4 = \underline{\underline{2431.0125}}$$

c) Quarterly $\Rightarrow CP = 4$

$$n = 2 \times 4 = 8$$

$$R = \frac{10}{400} = 0.025$$

$$A_2 = 2000 [1.025]^8 = \underline{\underline{2436.80}}$$

d) Monthly $\Rightarrow CP = 12$

$$n = 2 \times 12 = 24$$

$$R = \frac{10}{1200} = 0.008333$$

$$A_2 = 2000 (1.008333)^{24} = \underline{\underline{2440.7817}}$$