

# Midterm Review

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## Formulas:

$$\text{Equal Payment Amortization} \quad C = \frac{\text{PVA}}{\text{PVIFA}(r, t)} \quad (1)$$

$$\text{Future Value Interest Factor} \quad \text{FVIF}(r, t) = (1 + r)^t \quad (2)$$

$$\text{Present Value Interest Factor} \quad \text{PVIF}(r, t) = \frac{1}{(1 + r)^t} \quad (3)$$

$$\text{Equal Payment} \quad C = \frac{\text{PVA}}{\text{PVIFA}(r, t)} \quad (4)$$

$$1. \quad (a) \quad C_{50-\text{months}} = \frac{\text{PVA}}{\text{PVIFA}(r, t)} = \frac{2,139,423}{\text{PVIFA}(1.01, 62 - 12)} = \frac{2,139,423}{39.196} = 54,582.5233 \text{ Baht per Month}$$

Total is  $54,582.5233 \times 50 = 2,729,126.167$  Baht

$$C_{62-\text{months}} = \frac{2,729,126.167}{62} = 44,018.16398 \text{ Baht}$$

(b) a

$$2. \quad (a) \quad \text{FVIF}_{\text{BBL}} = \text{FVIF}\left(\frac{8.95}{6}, 1 \times 6\right) = 1.0929$$

$$\text{FVIF}_{\text{SCB}} = \text{FVIF}\left(\frac{9.00}{3}, 1 \times 3\right) = 1.0927$$

$$\text{FVIF}_{\text{TFB}} = \text{FVIF}\left(\frac{9.05}{2}, 1 \times 2\right) = 1.0925$$

Since  $\text{FVIF}_{\text{TFB}}$  has the lowest **Effective Annual Rate**; therefore, it is the cheapest choice to go with.

(b) **Note: Only the first two years**

$$C = \frac{\text{PVA}}{\text{PVIFA}(r, t)} = \frac{1.6 \times 10^6}{\text{PVIFA}\left(\frac{9.00}{3}, 10 \times 3\right)} = \frac{1.6 \times 10^6}{19.60} = 81,630.8149 \text{ Baht per 4 Months}$$

Total for the first two years =  $81,630.8149 \times 3 \times 2 = 489,784.8895$  Baht Let  $F = 489,784.8895$