

~~CONFIDENTIAL~~

INTRODUCTION

~~1.1~~ Problem 1

(a) $F_5 = 20,000 (F/P, 9, 5) = 30,772$

$F_{10} = 20,000 (F/P, 9, 10) = 47,347$

(b) $2 = 1(1 + 0.09)^n \quad n = 8.04$

(c) $F_6 = 1500 (F/A, 9, 7) = 13,800.652$

~~$F_6 = 13,800.652 (1.09)^{8.04} = 23,772$~~

(d) $140,000 = (F/P, 5, 1) [A(F/P, 5, 5) + A(F/A, 5, 4)]$

$A = 140,000 / (F/P, 5, 1) [(F/P, 5, 5) + (F/A, 5, 4)]$

$A = 140,000 / (1.05) (1.27628 + 4.31012) = 23,867.40$

~~... solving the MARR of 15%.~~

~~1.2~~ Problem 2

(a) $A = 73,600 (A/P, 1.25, 240) = 969.157$

(b) $P = 969.157 (P/A, 1.25, 180) = 69,245.93$

(c) $A = 69,245.93 (A/P, 0.75, 180) = 702.338$