#1-208A

EASY INTERMEDIATE HARD

CFA® SAMPLE QUESTION – LEVEL I

Quantitative Methods

Q: Find the future value of the following uneven cash flow stream. Assume end of the year payments. Assuming that the discount rate is 12%.

Year 1: -2,000
Year 2: -3,000
Year 3: 6,000
Year 4: 25,000
Year 5: 30,000

CORRECT ANSWER:

© $58,164.58.

N = 4; I/Y = 12; PMT = 0; PV = -2,000; CPT → FV = -3,147.04
N = 3; I/Y = 12; PMT = 0; PV = -3,000; CPT → FV = -4,214.78
N = 2; I/Y = 12; PMT = 0; PV = 6,000; CPT → FV = 7,526.40
N = 1; I/Y = 12; PMT = 0; PV = 25,000; CPT → FV = 28,000.00
N = 0; I/Y = 12; PMT = 0; PV = 30,000; CPT → FV = 30,000.00
Sum the cash flows: $58,164.58.

Alternative calculation solution:
= - 2,000 × 1.12^4 – 3,000 × 1.12^3+ 6,000 × 1.12^2 + 25,000 × 1.12^1 + 30,000
= $58,164.58.

CFA Society Hong Kong Candidate Services

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