

Exercise 2024-12 TH-00001(1) Future value

- (1) Determine the value of the following investments after the given period by using a formula.
Assume that payment is done at the end each investment period.

- (a) R1 000 per month for six years at 6,6% per annum, monthly compounded.
- (b) R600 per month for ten years at 12% per annum, quarterly compounded.
- (c) R15 000 per month for five years at 8,4% per annum, annually compounded.
- (d) R754 per month for twenty years at 10% per annum, monthly compounded.

- (2) Determine the monthly installment on each of the following annuities by using a formula.

Assume that payment is done at the end each investment period.

Future amount of:

- (a) R700 000 after 48 months at 5,6% per annum, monthly compounded.
- (b) R6 000 000 after ten years at 14,1% per annum, quarterly compounded.
- (c) R350 000 after two decades at 11,4% per annum, annually compounded.
- (d) R17 000 000 after thirty years at 6,1% per annum, monthly compounded.