 NESA exemplar question solutions

F5 Annuities

Solutions for questions from the NESA topic guidance related to investments and loans.

1. Table of future value interest factors



Calculate the future value of an annuity of $\$1200$ per year for three years at $5\%$ pa.

Solution*:* $3.1525 ×\$1200=\$3783$

1. Table of present value interest factors



Determine the monthly repayment $a$ for a car loan of $\$8000$ at $9\%$ pa for four years.

Solution*:* $4$ years $=48$ months and $9\%$ pa $=0.0075$% per month

$$\$8000=a×40.18478$$

$$a=\frac{\$8000}{40.18478}$$

$$a=199.0803483$$

$a=\$199$ (correct to the nearest dollar)

$∴$ The monthly repayment would be$ \$199$.