SMART EXAM RESOURCES
TOPIC : NUMBERS
SUB-TOPIC:COMPOUND INTEREST
SET-1-QP-MS

1 Boris invests $280 for 2 years at a rate of 3% per year compound interest.

Calculate the interest Boris receives at the end of the 2 years.
Give your answer correct to 2 decimal places.

Answer $ ..... [4]

MARK SCHEME:

17.05 **cao www**	**4**	**M1** for $280 \times (1 + \frac{3}{100})^2$ oe **M1** subtracting 280 from $280(1 + \frac{k}{100})^2$ any k **A1** for 17.052 or **SC2** 297.05 on answer line

2 Bruce invested $420 at a rate of 4% per year compound interest.

Calculate the **total** amount Bruce has after 2 years.
Give your answer correct to 2 decimal places.

Answer $ ..... [3]

MARK SCHEME:

454.27 cao final answer	**3**	**M1** for $420 \times (1+\frac{4}{100})^2$ oe and **A1** for 454 or 454.2 to 454.3 or **SC2** for answer 34.27 or **SC1** for answer 34.2 to 34.3

3 Carol invests $6250 at a rate of 2% per year compound interest.
Calculate the **total** amount Carol has after 3 years.

Answer $ ..... [3]

MARK SCHEME:

6632.55 cao final answer	**3**	**M2** for $6250 \times (1 + \frac{2}{100})^3$ oe **or M1** for $6250 \times (1 + \frac{2}{100})^2$ oe **SC2** for answer 382.55 final answer

4 Georg invests $5000 for 14 years at a rate of 2% per year compound interest.

Calculate the interest he receives.
Give your answer correct to the nearest dollar.

Answer $ ..... [4]

MARK SCHEME:

1597 cao	**4**	**B3** for 1597.39.. or 1597.3[9...] or 1597.4 or 6597 or **B2** for 6597.3[9...] or 6597.4 or **B1** for $5000\left(1+\frac{2}{100}\right)^{14}$ If **B1** scored or **B0** scored and an attempt at compound interest is shown **SC1** for *their* 6597[...] – 5000 evaluated correctly provided answer positive and **SC1** for *their* final answer rounded correctly to nearest $ from their more accurate answer