# SMART EXAM RESOURCES <br> 0580 EXTENDED MATH <br> TOPIC: NUMBERS <br> SUB-TOPIC: ROUNDING TO DOLLAR SET-1-QP-MS 

1 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.

MARK SCHEME:
$\left.\begin{array}{l|l|l|l}\hline 1597 \text { cao } & & \begin{array}{l}\text { B3 for } 1597.39 . . \text { or } 1597.3[9 \ldots] \text { or } 1597.4 \text { or } 6597 \\ \text { or } \mathbf{B} 2 \text { for } 6597.3[9 \ldots] \text { or } 6597.4\end{array} \\ \text { or } \mathbf{B} 1 \text { for } 5000\left(1+\frac{2}{100}\right)^{14} \\ \text { If } \mathbf{B 1} \text { scored } \\ \text { or } \\ \text { B0 scored and an attempt at compound interest is } \\ \text { shown } \\ \text { SC1 for their } 6597[\ldots]-5000 \text { evaluated correctly } \\ \text { provided answer positive } \\ \text { and } \\ \mathbf{S C 1} \text { for their final answer rounded correctly to } \\ \text { nearest \$ from their more accurate answer }\end{array}\right]$

2 The air fare from Singapore to Stockholm can be paid for in Singapore dollars (S\$) or Malaysian Ringitts (RM).
One day the fare was $\mathrm{S} \$ 740$ or RM1900 and the exchange rate was $\mathrm{S} \$ 1=\mathrm{RM} 2.448$.
How much less would it cost to pay in Singapore dollars? Give your answer in Singapore dollars correct to the nearest Singapore dollar.
Answer S\$

## MARK SCHEME:

| 36 cao | 3 | M1 1900/2.448 (=776.14) <br> A1 "776.(14...)" $-740(=36.14 \ldots)$ |
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Calculate how much interest she will receive after the 7 years. Give your answer correct to the nearest dollar.

## MARK SCHEME:

| 198 | $\mathbf{4}$ | B3 for $197.7 \ldots$ or answer 198.00 <br> or <br> $\mathbf{M 2}$ for $1800 \times\left(1+\frac{1.5}{100}\right)^{7}-1800$ <br> or <br> B2 for answer 1998 <br> or <br> $\mathbf{M 1}$ for $1800 \times\left(1+\frac{1.5}{100}\right)^{7}$ <br> If $\mathbf{B 0}$ then $\mathbf{B 1}$ for seeing their answer in decimal form <br> correctly written to the nearest integer |
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