SMART EXAM RESOURCES 0580 EXTENDED MATH TOPIC: NUMBERS 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:

	1	
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 <i>their</i> 6597[] – 5000 evaluated correctly provided answer positive
		and SCI for the formation of the formati
		SCI for <i>their</i> final answer rounded correctly to nearest \$ from their more accurate answer
	1	İ

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 \$ 3%740 or RM1900 and the exchange rate was \$ 1= RM2.448.

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\$ [3]

MARK SCHEME:

36 cao	3	M1 1900/2.448 (= 776.14) A1 "776.(14)" – 740 (= 36.14)

3 Hazel invests \$1800 for 7 years at a rate of 1.5% per year compound interest.

Calculate how much interest she will receive after the 7 years. Give your answer correct to the nearest dollar.

MARK SCHEME:

		1
198	4	B3 for 197.7 or answer 198.00 or M2 for $1800 \times \left(1 + \frac{1.5}{100}\right)^7 - 1800$ or B2 for answer 1998 or M1 for $1800 \times \left(1 + \frac{1.5}{100}\right)^7$ If B0 then B1 for seeing their answer in decimal form
		If B0 then B1 for seeing their answer in decimal forn correctly written to the nearest integer