Question	Answer	Mark	Mark scheme	Additional guidance
22 (a)	Explanation	C1	for explanation, **Acceptable examples** the 5% is off a different value each year it decreases by 5% of the new value doesn't decrease by same amount each year it is compound depreciation (not simple depreciation) used simple depreciation (not compound depreciation) should have used $P\left(1+\frac{r}{100}\right)^n$ / $19\,950\left(1-\frac{5}{100}\right)^4$ the answer should be 16 249(...) he should multiply (19 950) by 0.95^4 it decreases by 18.5% (not 20%) the value of the 5% decreases each year value decreases by less each year need to work it out for each year separately as the number changes it loses 5% of its value at the end of the year **Not acceptable examples** his answer is correct his answer is wrong should have used $19\,950\left(1+\frac{5}{100}\right)^4$ he should multiply by 1.05^4 he should divide by 1.05^4 it does not decrease by 20% 4 × 5% is incorrect didn't find the multiplier / incorrect multiplier $x \times 0.95^4 = 19\,950$ he should multiply (19 950) by 0.95^5 need to work it out for each year separately	Condone use of word 'interest' for 'depreciation' Accept 'normal' for 'simple' Accept 'composite' for 'compound' Accept 'change' for 'decrease'

Question	Answer	Mark	Mark scheme	Additional guidance
(b)	288 to 290	P1	for use of a correct multiplier, eg 0.95 oe or for a correct process to find the value after one year, eg 19 950 – 0.05 × 19 950 (= 19 950 – 997(.50) = 18 952(.50)) oe	
		P1	for evidence of a compound depreciation process, eg "18 952(.50)" – 0.05 × "18 952(.50)" (= 18 004(.8…)) oe **or** $19\,950 \times 0.95^4$ (= 16 249...) oe eg $19\,950\left(1-\frac{5}{100}\right)^4$ $(=16\,249...)$ **or** $19\,950 \times 0.95^t$ where $t \geq 2$	May be seen in more than one calculation Accept rounding at intermediate stages Award of this mark implies the first P1
		P1	for a complete process, eg "16 249..." – 15 960 or 15 960 – "16 249..."	
		A1	for answer in the range 288 to 290 or −290 to −288	If correct answer in range is seen and then incorrectly rounded award full marks