Concept – Percentages

Some useful equations when working with percentages are:

To change a percentage to a decimal $$decimal = \frac{\%}{100}$$

To calculate a percentage $$\% = \frac{part}{whole} \times 100$$

To find the percentage of an amount: $$part = \frac{\%}{100} \times whole$$

Eg: Of the 348 people who regularly visit a fast food outlet, 87% will upsize their meal to large if asked. If the staff ask everyone how many will purchase a large meal?

How To – Calculate the price of an item on sale

1. Convert the percentage into a decimal.
2. Multiply the decimal by the original price.
3. Subtract the answer from the original price.

Eg: A new Flashbomb wetsuit is marked at $699.95. If the store is having a 35% of all wetsuits sale how much will the Flashbomb cost during the sale?

Concept - Simple Interest

Simple interest is calculated using the equation:

$$I = \frac{P \times R \times T}{100} \qquad A = P + I$$

Eg: Amy invests $12450 into an account that pays simple interest at a rate of 3.25% p.a. How much interest will she earn in 4 years and what will the value of her investment be after this period of time?

How To – Use CAS for Simple Interest

If a simple interest question asks you to find the principle, the rate or the time use the solve function on CAS

1. On a  _____ page press _____ →_____→_____
2. Type in the simple interest formula will all known values substituted in.
3. inside the brackets press , _____ then type the letter you need to solve for and press enter

You can't use Finance Solver for simple interest

Eg: Amy has $12450 to invest and she needs her total investment to be worth $16000 in 6 years. How much interest will she need to earn and what interest rate will she need?

Concept - Compound Interest

Compound interest is calculated using the equations:

$$V_n = V_0\left(1+\frac{r}{100}\right)^n \qquad I = V_n - V_0$$

Eg: Amy decides she will be able to earn more interest if she invests with a bank who will pay her compound interest. One bank she looks at will pay 3.25% p.a on her $12450 investment but will compound this monthly. How much will her investment be worth after 4 years, and how much interest will she have earned?

How To – Use Finance Solver with Compound Interest

1. On a  _____ page press _____ →_____→_____
2. Leave Pmt =0 and PmtAt = END.
3. N = _____
4. I = _____
5. PV = _____
6. CpY = PpY = _____
7. Move into the FV section and press enter. If you need to know I, use $I = FV - PV$

Don't use the solve function with compound interest.
In Finance Solver put your cursor in the section you need to solve for and press enter.

Eg: Amy invests her $12450 with the bank at 3.25 % p.a compounding monthly and forgets about it. Much later she remembers and when she checks she has $17 223.65 in the account. How many years have passed?

Concept	Practice Questions	Bound Reference
Prepare for exam questions about percentages, simple interest and compound interest.	Chapter 4 Review **Entry: MC** 1, 2, 7, 9, 10 **SA** 4 **EA** 1a ▢ **Expected: MC** 1, 2, 3, 7, 8, 9, 10 **SA** 2, 4 **EA** 1 ▢ **Expected +: MC** 1, 2, 3, 7, 8, 9, 10 **SA** 1, 2, 4 **EA** 1 ▢	Concept ▢ How to ▢ Example(s) ▢