

Year 9 Knowledge Organiser

Growth and Decay

What do I need to be able to do?

By the end of this unit you should be able to:

- Convert and compare FDP
- Work out percentages of amounts
- Increase/ decrease by a given percentage
- Express one number as a percentage
- Calculate simple and compound interest
- Calculate repeated percentage change
- Find the original value
- Solve problems with growth and decay

Keywords

Exponent: how many times we use a number in multiplication. It is written as a power.

Compound interest: calculating interest on both the amount plus previous interest.

Depreciation: a decrease in the value of something over time.

Growth: where a value increases in proportion to its current value such as doubling.

Decay: the process of reducing an amount by a consistent percentage rate over time.

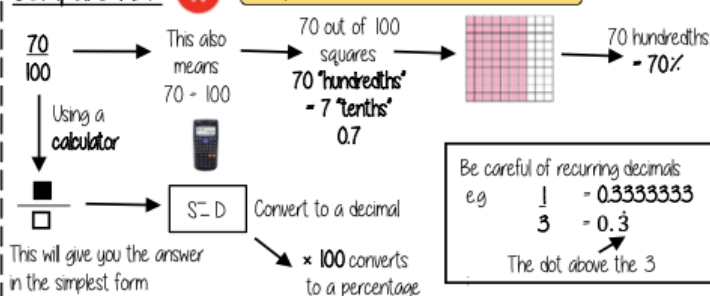
Multiplier: the number you are multiplying by.

Equivalent: of equal value.

Compare FDP

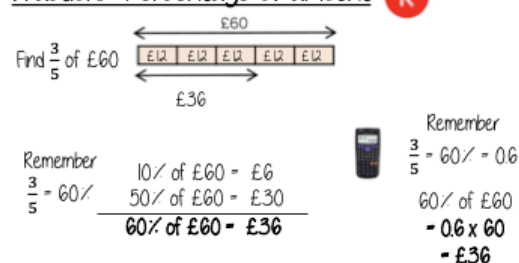
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Comparisons are easier in the same format.



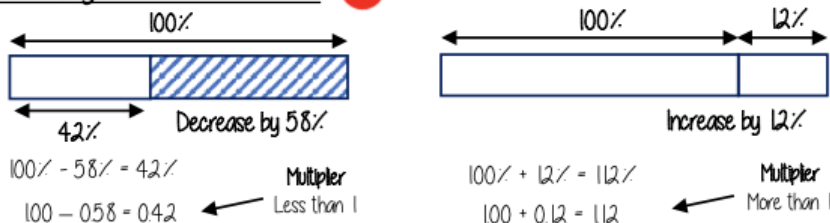
Fraction/ Percentage of amount

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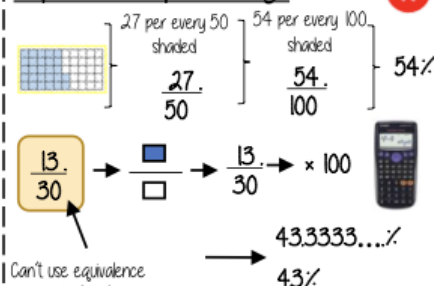
Percentage increase/decrease

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Express as a percentage

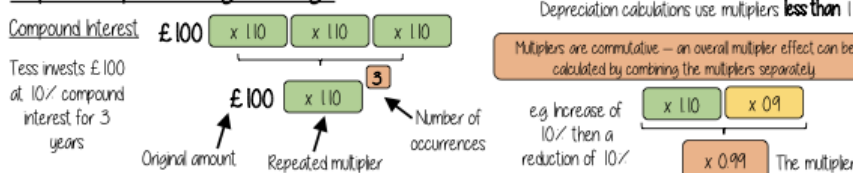
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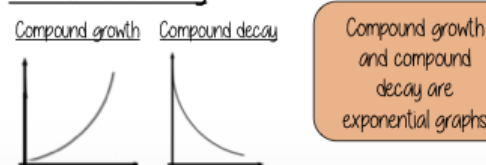
Simple and compound interest



Repeated percentage change



Growth and decay



Find the original value

