

Euclid's Elements

Book V



Proportions are what makes the old Greek temples classic in their beauty. They are like huge blocks, from which the air has been literally hewn out between the columns.

$$AB:C = DE:F$$

$$BG:C = EH:F$$

$$AG:C = DH:F$$

Arne Jacobsen



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Proposition 9 of Book V

Magnitudes which have the same ratio to the same are equal to one another; and magnitudes to which the same has the same ratio are equal



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In other words

Let the ratios of A to C and B to C be equal

Then A and B are equal

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$$C:A = C:B \rightarrow A = B$$



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