

Math 105

9 December 2003

Φ and Music

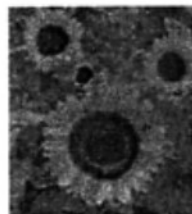
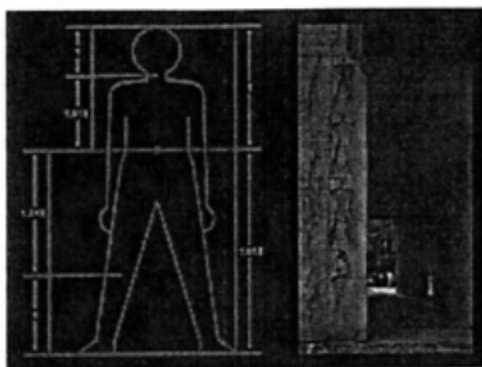
Through out western history Φ , also know and the Golden ratio or the divine proportion has had major effects on western cultural development and on western concepts of beauty, from architecture:



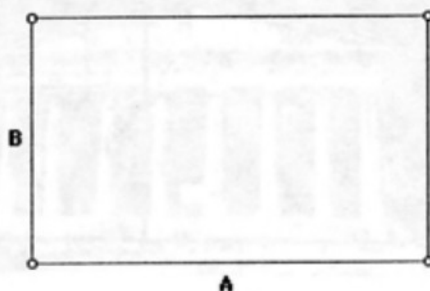
to art:



and to the understanding of science, nature, mathematics, and the structure of the human body:



The wide sweeping affects that the Golden Ratio has on western society is profound and is clearly illustrated by the Golden Rectangle:



$$\frac{A}{B} = 1.618$$

The ratio of the long side over the short side of the golden rectangle equals Φ and the ratio of the short side over the long side equals the negative inverse of Φ . The golden rectangle is far more visually pleasing than a rectangle with a ratio that does not equal Φ ; is not overlooked the modern consumer society:



