Euler Characteristic in 2, 3- and 4-dimensions

The Euler characteristic of a geometric object, written as χ , is the alternating sum of the number of "lower dimensional" pieces of the object

Dimension 2:

$\chi = V - E$

Dimension 3:

$\chi = V - E + F$

Dimension 4:

$\chi = V - E + F - S$

	Tetrahedron	Cube	Hypertetrahedron	Hypercube
# V =				
# E =				
# F =				
# S =	0	0		