

## 12.1.13 Editors - Geometry Nodes Editor - Header - Add Menu - Mesh

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## Detailed table of content

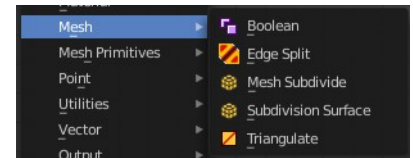
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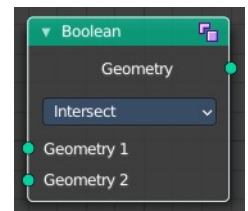
## Add menu - Mesh

Nodes to modify the mesh geometry.



### Boolean

The Boolean Node allows you to cut, subtract, and join the geometry of two inputs. This node offers the same operations as the Boolean modifier.



### Inputs

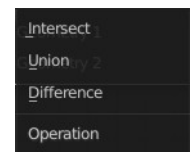
Geometry 1, 2

Standard geometry input.

### Properties

#### Operation

The boolean operation.



#### Intersect

Produce a new geometry containing only the volume inside of both geometry 1 and geometry 2.

## Union

The two input pieces of geometry are joined, then any interior elements are removed.

## Difference

Geometry 2 is subtracted from geometry 1 (everything outside of geometry 2 is kept).

## Output

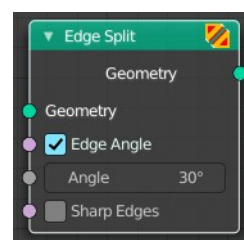
### **Geometry**

Standard geometry output.

## Edge Split

The Edge Split node splits as split edge marked edges into two edges.

Note that splitting edges breaks the mesh topology.



## Inputs

### **Geometry**

Standard geometry input.

### **Edge Angle**

When enabled, edges will be split if the angle between its two adjacent faces is greater than the Split Angle.

### **Angle**

On 0: all edges are split. On 180: no edges are split.

### **Sharp Edges**

When enabled, edges will be split if they were marked as sharp.

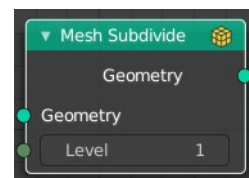
## Outputs

### **Geometry**

Standard geometry output.

## Mesh Subdivide

Subdivides the geometry by a simple division



## Inputs

### **Geometry**

Standard geometry input.

### **Level**

To which degree the geometry will be deformed.

## Outputs

### **Geometry**

Standard geometry output.

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## Subdivision Surface

The Subdivision Surface node subdivides the geometry using Catmull-Clark deformation.

## Inputs

### **Geometry**

Standard geometry input.

### **Level**

To which degree the geometry will be deformed.

### **Creases**

Control how smooth edges should be with Weighted Edge Creases.

### **Boundary Smooth**

Controls if open boundaries and corners are smooth.

### **Smooth UVs**

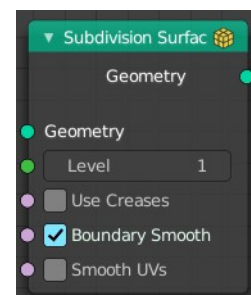
Controls if subdivision smooth is applied to UVs.

## Outputs

### **Geometry**

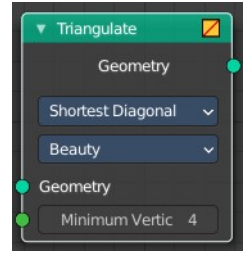
Standard geometry output.

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# Triangulate

The Triangulate node triangulates all faces in a mesh.



## Inputs

### Geometry

Standard geometry input.

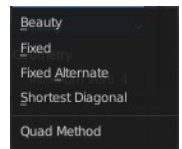
### Minimum Vertices

Minimum number of vertices a face must have to be triangulated. For example, setting this value to 5, will prevent triangulation of Quads and only triangulate N-gons.

## Properties

### Quad Method

A quad is a polygon with four edges.



### Beauty

Split the quads in nice triangles, slower method.

### Fixed

Split the quads on their 1st and 3rd vertices.

### Fixed Alternate

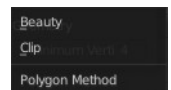
Split the quads on their 2nd and 4th vertices.

### Shortest Diagonal

Split the quads based on the diagonal distance between their vertices.

### Polygon Method

Meant are N-Gons. Faces with more than four edges. Tris, Quads and N-Gons are all Polygons.



### Beauty

Arrange the new triangles nicely, slower method.

### Clip

Split the polygons using an ear-clipping algorithm (gives similar results to the tessellation used for the viewport rendering).

## Outputs

### Geometry

Standard geometry output.