GEOMETRICAL SOLIDS



Co-funded by the European Union



2024-1-PL01-KA220-VET-000243150

JACEK KAWAŁEK





OPEN BLENDER







DELETE CUBE







GO TO PREFERENCES







ADD EXTRA OBJECTS

| 🔊 Blender Preferences | | | | | _ | - | | × |
|-----------------------|----------------|-------------------|---------|----------|---------|----|---------|---|
| Interface | Official | Community | Testing | 1 | Install | 22 | Refresh | |
| Themes | Enabled Add-or | ns Only All | | ~ | , | | | × |
| Viewport | 🕨 🗆 Add Curv | ve: Extra Objects | | | | | | 2 |
| Lights | 🕨 🗹 Add Mesl | h: Extra Objects | | | | | | |
| Editing | | | | | | | | |
| Animation | | | | | | | | |
| Add-ons | | | | | | | | |
| Input | | v | | | | | | |
| Navigation | | | | | | | | |
| Keymap | | | | | | | | |
| System | | | | | | | | |
| Save & Load | | | | | | | | |
| File Paths | | | | | | | | |
| | | | | | | | | |





WITH SHIFT+A ENTER REGULAR SOLID

| Add | | | | | |
|---|--------|--|---|---|-----------|
| ✓ Mesh ✓ Curve ✓ Surface ✓ Metaball ⓓ Text ▲ Volume ☑ Grease Pencil | • | Plane Cube Circle UV Sphere Consphere Cylinder Cone | | | |
| ★ Armature # Lattice ▶ Empty ▶ Image | * * | ⊙ Torus ፹ Grid 양 Monkey ② Rock Generator | | | |
| Light Light Probe Camera Speaker | * | Single Vert Round Cube Torus Objects Math Function | | Z Math Surfac | |
| Force Field Collection Instance | | ♥ Gears ↓ Pipe_Joints Diamonds | * | XYZ Math Sur Regular Solid Triangle | Add one o |
| | | Extras Parent To Empty | | | Add one o |





OPEN THE WINDOW IN THE BOTTOM LEFT CORNER







OPEN THE PRESETS TAB

| | | _ | + | |
|---------------------|-------------|-------|----|----|
| ✓ (Regular) solids | | | | |
| Operator Presets | | ~ + - | | |
| Source | Tetrahedron | ~ | | - |
| Size | 1.00 | | | |
| Vertex Truncation | 0.000 | | | |
| Truncation | 0.000 | | | - |
| Snub | No Snub | ~ | | |
| | Dual | | | |
| | Keep Size | | | - |
| Presets | Custom | ~ | | |
| Playback 🗸 Keying 🗸 | View Marker | | | |
| 1 10 20 | 30 | 40 | 50 | 60 |





CHOOSE TRUNCATED ICOSIDODECAHEDRON







YOU WILL GET THIS MODEL







GO TO EDIT MODE







PRESS KEY X AND SELECT LIMITED DISOLVE







EXCESS ITEMS WILL BE REMOVED







GO TO OBJECT MODE







SELECT WIREFRAME MODIFIER







THIS IS HOW IT WORKS







OVERRIDE THE SETTINGS IN THE THICKNESS WINDOW







ADD TEXT WITH SHIFT+A







TEXT IS INSERT INTO THE 3D CURSOR







SET TEXT BEFORE MODEL







GO TO EDIT MODE FOR TEXT







ENTER MODEL NAME







YOU CAN ALIGN THE FONT







IF YOU ARE PLANNING TO PRINT 3D YOU CAN USE THE FONT ARIAL BLACK







WITH THE RIGHT MOUSE KEY CONVERT TEXT TO MESH SELECT CONVERT TO / MESH

| Trun | Object Context Menu |
|-----------|---|
| Icosidode | Adjust Extrusion Adjust Offset |
| | Set Origin Mesh Copy Objects Ctrl C Grease Per** Convert selected objects to another type: Mesh Paste Objects Ctrl V Mesh from Curve Surface Metaball or Text objects |
| | Duplicate Objects Shift D Duplicate Linked Alt D |
| | Rename Active Object F2 |





GO TO EDIT NODE







WITH THE A KEY SELECT ALL







CLICK ON X AND SELECT LIMITED DISSOLVE







UNNECESSARY ELEMENTS WILL BE REMOVED







EXTRUDE TEXT







GO TO OBJECT MODE







ADD COLORS







TO MAKE THE TEXT BETTER VIEWED IN 3D GLASSES, SLIGHTLY CHANGE THE COLOR OF THE SIDE WALLS







SELECT EXPORT TO GLB FORMAT







IN CLASS-VR SYSTEM CLICK ON UPLOAD







SELECT FILE TO DOWNLOAD







IMPORTED AS A 3D MODEL







BY CLICKING ON IT WE WILL SEE THE PREVIEW AND PARAMETERS OF THE FILE

← 01_Truncated.glb

| Filename Type | 01_Truncated.glb model/gltf-binary | |
|------------------|---------------------------------------|--------------------------------|
| Size (bytes) | 449 312 | |
| Timestamp | 2024-11-18T17:29:29.000Z | |
| | | |
| | | Truncated Icceldodecahedron |





NOW WE CAN TRANSFER TO 3D GLASSES







CREATE THE REST OF THE MODELS YOURSELF







EXPORT ALL TO GLB AND STL









YOU CAN ADD STANDS AND PRINT ALL OF THEM ON A 3D PRINTER









A MODEL MADE IN THIS WAY CAN BE PRINTED WITHOUT SUPPORTS



THANK YOU FOR YOUR ATTENTION



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