

Pensieve header: An elephant from <http://www.blendswap.com/blends/view/18009>.

```
SetDirectory["C:\\drorbn\\AcademicPensieve\\2013-04\\Elephant"]
```

```
C:\\drorbn\\AcademicPensieve\\2013-04\\Elephant
```

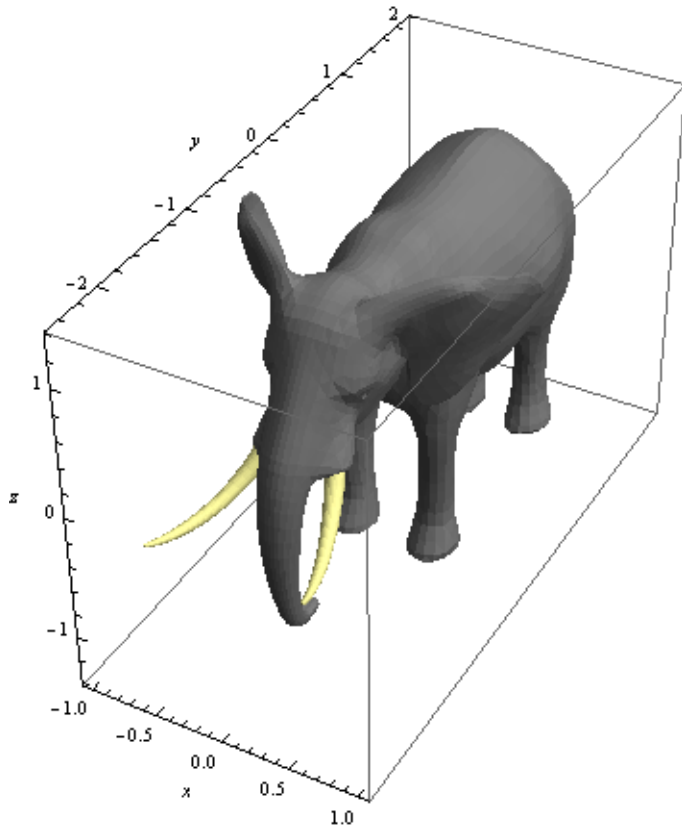
```
Rasterize[e1 = Import["elephant.3ds"]]
```



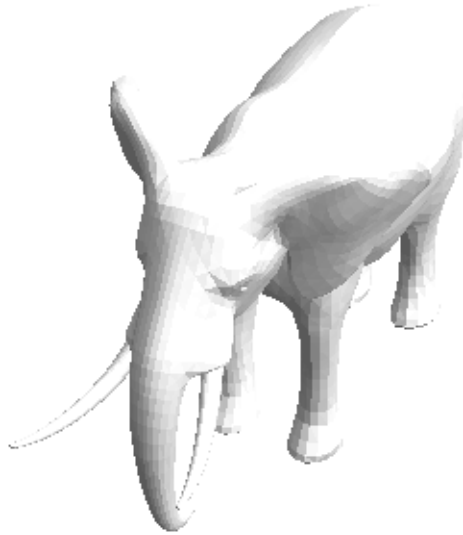
```
Rasterize[e11 = Import["elephant.stl"]]
```



```
Show[el, Boxed → True, Axes → True, AxesLabel → {x, y, z}] // Rasterize
```



```
DeleteCases[e1, _RGBColor, Infinity] // Rasterize
```



```
Length /@ Cases[e1, Polygon[1_] => Polygon@@1, Infinity] // Union
{3}
```

```
List @@ e1 /. _GraphicsComplex => Here
```

```
{{EdgeForm[], {Here, Here}}, Boxed -> False, Lighting -> Neutral}
```

```
{{EdgeForm[], {Here, Here}}, Boxed -> False, Lighting -> "Neutral"}
```

```
{{EdgeForm[], {Here, Here}}, Boxed -> False, Lighting -> Neutral}
```

```
gc1 = Cases[e1, _GraphicsComplex, Infinity][[1]]
```

A very large output was generated. Here is a sample of it:

```
GraphicsComplex[{{0.385466, -0.334883, -0.796122},
  {-0.385466, -0.334883, -0.796122}, {0.405733, -0.378378, -0.434473},
  <<5997>>, {0., 0.233152, -0.261313}, {0., 0.233152, -0.261313}}, {<<1>>}]
```

Show Less

Show More

Show Full Output

Set Size Limit...

```
gc2 = Cases[e1, _GraphicsComplex, Infinity][[2]]
```

A very large output was generated. Here is a sample of it:

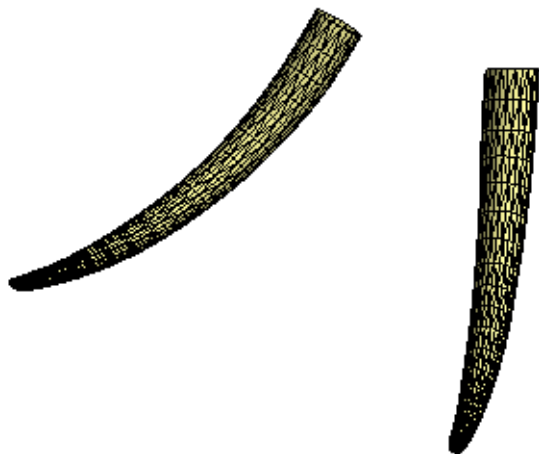
```
GraphicsComplex[{{0.253605, -1.45347, 0.0953362},  
  {-0.253487, -1.45347, 0.0953363}, {0.223446, -1.46925, 0.0965511}, <<997>> ,  
  {0.568858, -2.45196, -0.0673456}, {-0.56874, -2.45196, -0.0673457}}, {<<1>>}]
```

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```
Graphics3D[{EdgeForm[], {gc1, gc2}},  
  Boxed → False, Lighting → "Neutral" // Rasterize
```



```
Graphics3D[{{gc2}}, Boxed → False, Lighting → "Neutral"] // Rasterize
```

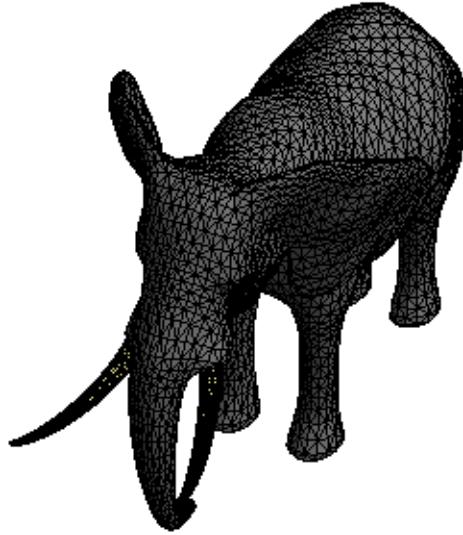


```
l1 = Length[gc1[[1]]];
gc = GraphicsComplex[
  Join[gc1[[1]], gc2[[1]]],
  Join[gc1[[2]], gc2[[2]] /. Polygon[ps_List] => Polygon[l1 + ps]]
]
```

A very large output was generated. Here is a sample of it:

```
GraphicsComplex[{{0.385466, -0.334883, -0.796122},
  {-0.385466, -0.334883, -0.796122}, {0.405733, -0.378378, -0.434473}, <<6999>>,
  {0.568858, -2.45196, -0.0673456}, {-0.56874, -2.45196, -0.0673457}}, {<<1>>}]
```

```
Graphics3D[{gc}, Boxed -> False, Lighting -> "Neutral"] // Rasterize
```



```
Graphics3D[  
  {EdgeForm[], GraphicsComplex[gc[[1]], Select[gc[[2]], Random[] < 0.15 &]],  
  Boxed → False, Lighting → "Neutral" // Rasterize
```



```
gc[[1]] >> ElephantVertices.m
```