Aufgabe 2:

Algebra 3D

Sorts:

volume, surface, point, triangle, quader, list?

Ops:

createPoint int x int x int 🡪 point

createTriangle point x point x point 🡪 triangle

adjacent triangle x triangle 🡪 bool

touch triangle x triangle 🡪 bool

createSurface list of triangles 🡪

createVolume list of triangles 🡪

size 🡪 int

bbox 🡪 quader

translate 🡪

createCube point x point 🡪 quader

Sets:

volume =

surface =

point = (int, int, int)

triangle = (point,point,point)

quader =

Functions:

createPoint(a,b,c) = (a,b,c)

createTriangle (point1, point2, point3)

= (point1, point2, point3)

adjacent(triangle1, triangle2)

=

touch(triangle1, triangle2)

=

createSurface()

= 🡪

createVolume()

= 🡪

size 🡪 int

bbox 🡪 quader

translate 🡪

createCube point x point 🡪 quader

Axiome:??????