// ProceduralTerrain

```
for (int x = 0; x < x_segments; x++) {
for (int z = 0; z < z_segments; z++) {
  float height00 = GetHeight(x + 0f, z + 0f, x_segments, z_segments);
  float height01 = GetHeight(x + 0f, z + 1f, x_segments, z_segments);
  float height[10] = GetHeight(x + 1f), (z + 0f), x_segments, z_segments);
  float height \overline{11} = GetHeight(x + 1f, z + 1f, x_segments, z_segments);
  This is how we define
  Right(x = 1)
                                the four corners of
  int(x1) = (x + 1) * CellSize;
                                                      Near(z = 0)
  int \overline{z1} = (z + 1) * CellSize; a terrain segment
  var vertex00 = new Vector3(
     (float) x0, height00 * (float) TerrainHeight, (float) z0
   );
  var vertex01 = new Vector3(
     (float) x0, height01 * (float) TerrainHeight, (float) z1
   );
  var vertex10 = new Vector3(
     (float) x1, height(10) * (float) TerrainHeight, (float) z0
   );
  var vertex11 = new Vector3(
     (float) x1, height11 * (float) TerrainHeight, (float) z1
   );
```

// ProceduralTerrain

```
for (int x = 0; x < x_segments; x++) {
for (int z = 0; z < z_segments; z++) {
  float height00 = GetHeight(x + 0f, z + 0f, x_segments, z_segments);
  float height01 = GetHeight(x + 0f, z + 1f, x_segments, z_segments);
  float height10 = GetHeight(x + 1f, z + 0f, x_segments, z_segments);
  float height 11 = GetHeight(x + 1f), (z + 1f), x_segments, z_segments);
  This is how we define
  Right(x = 1)
                               the four corners of
  int x1 = (x + 1) * CellSize;
                                                     Far(z = 1)
  int [z1] = (z + 1) * CellSize; a terrain segment
  var vertex00 = new Vector3(
    (float) x0, height00 * (float) TerrainHeight, (float) z0
  );
  var vertex01 = new Vector3(
    (float) x0, height01 * (float) TerrainHeight, (float) z1
  );
  var vertex10 = new Vector3(
    (float) x1, height10 * (float) TerrainHeight, (float) z0
  );
  var vertex11 = new Vector3(
    (float) x1, height(11) * (float) TerrainHeight, (float) z1
  );
```