```
// ProceduralTerrain

  for (int x = 0; x < x_segments; x++) {
    for (int z = 0; z < z_segments; z++) {


    …


    var vertex11 = new Vector3(
      (float) x1, height11 * (float) TerrainHeight, (float) z1
    );

    int index0 = 6 * (x + z * x_segments);

    int index1 = index0 + 1;
    int index2 = index0 + 2;
    int index3 = index0 + 3;
    int index4 = index0 + 4;
    int index5 = index0 + 5;


    …
```

Our vertices and triangles Lists
need indexes to keep them in sync

Both Lists must be in sync
for the triangles, quads, and terrain
to render correctly

```
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  for (int z = 0; z < z_segments; z++) {


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```
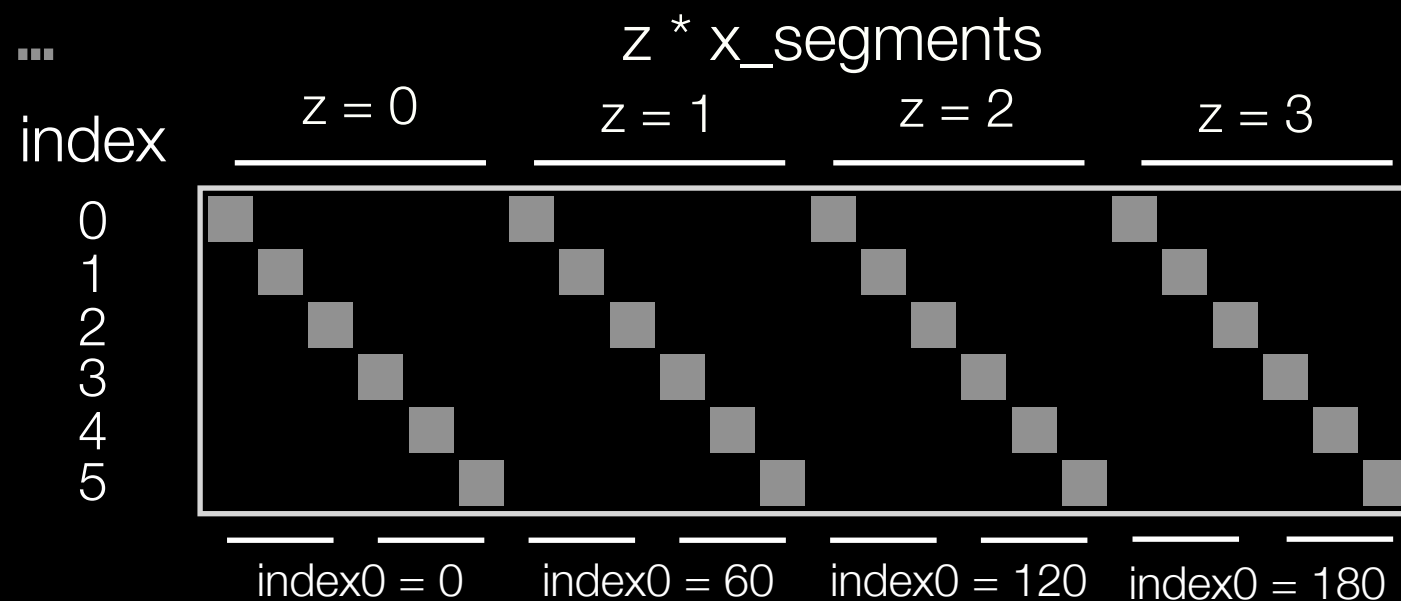
z * x_segments

z = 0   z = 1   z = 2   z = 3

index

0
1
2
3
4
5

index0 = 0   index0 = 60   index0 = 120   index0 = 180

How we determine
the indexes to use
for the vertices
and triangle Lists

——— Triangle   ————— Quad