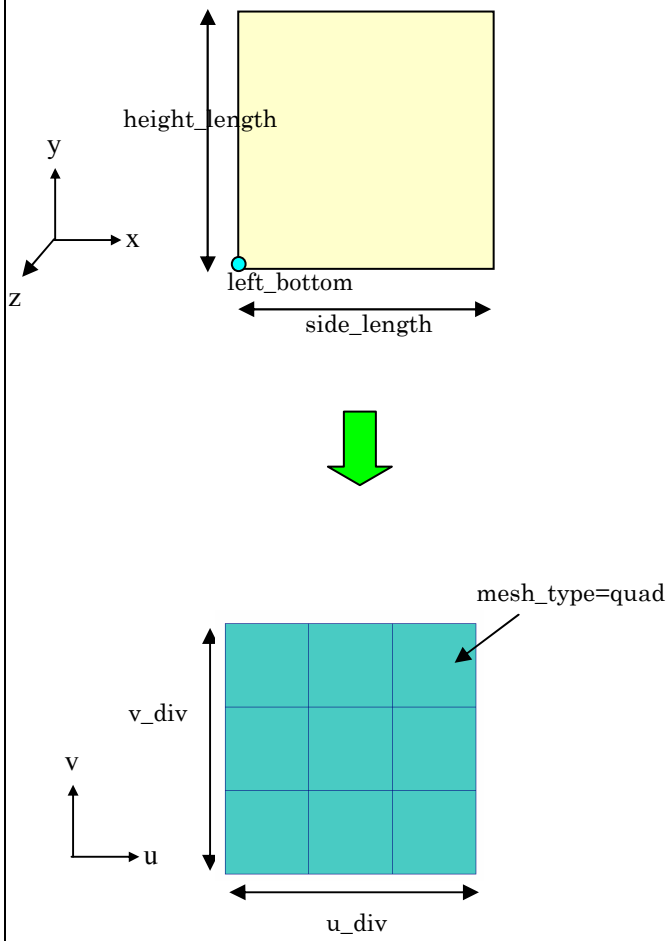
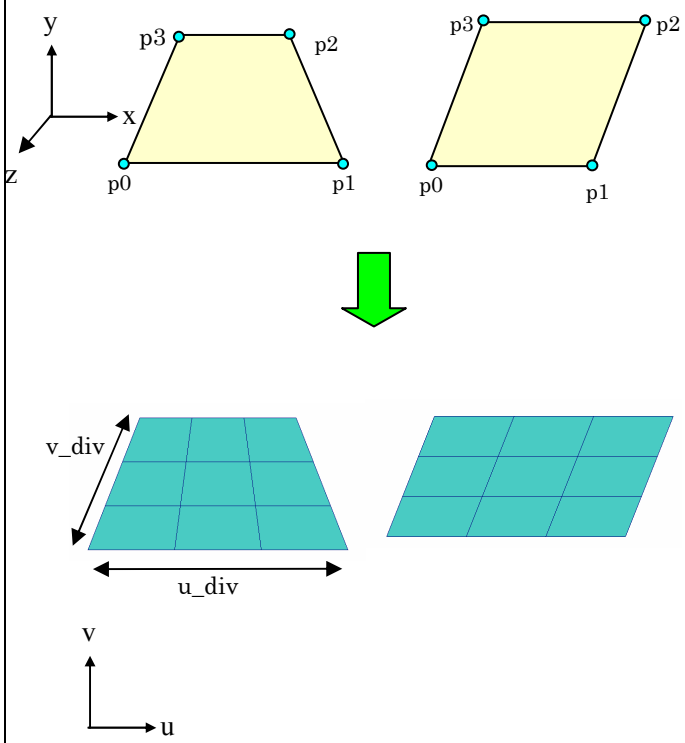
No	Case study	content	exsample source
1	rectangle		[shape] name=test1 geometry_type=rectangle side_length = 10 height_length = 10 left_bottom=10.0 10.0 0.0 [operation] format = command <data> MESH_CREATE, input_name=test1,mesh_type=quad,u_div=3,v_div=3,mesh_name="AA" MESH_PRINT, input_mesh_name="AA", format=vtu, output_name="out.vtu" </data>

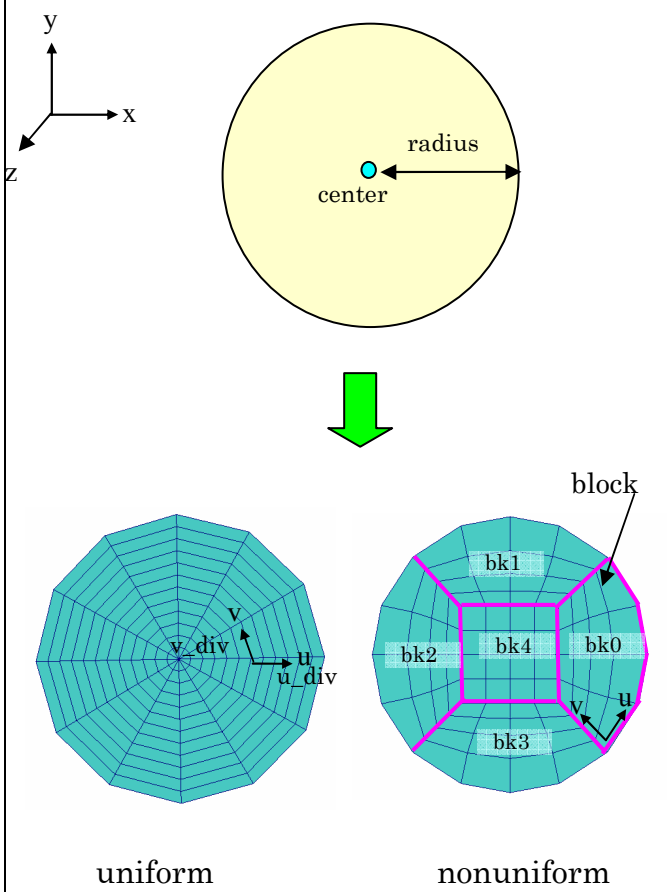
[shape]command

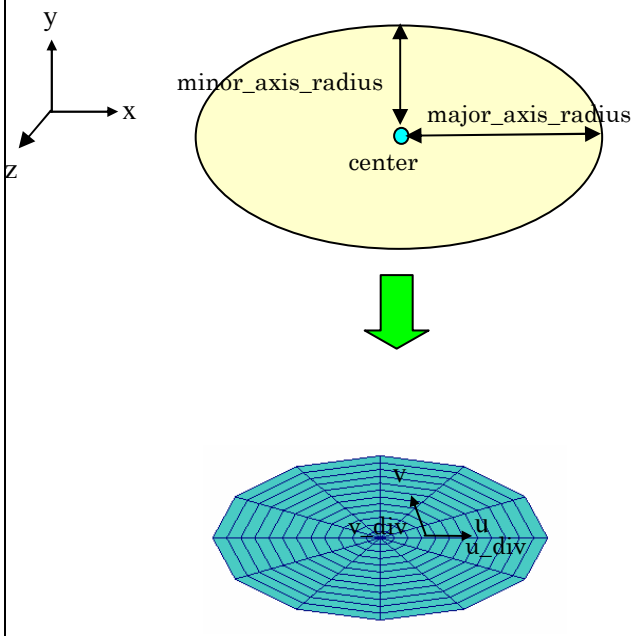
No	key	default value	contents of the value
1	name	no default	name of shape
2	geometry_type	no default	“rectangle”
3	side_length	1.0	0 < value.
4	height_length	1.0	0 < value.
5	left_bottom	origin (0.0,0.0,0.0)	positon left bottom of rectangle

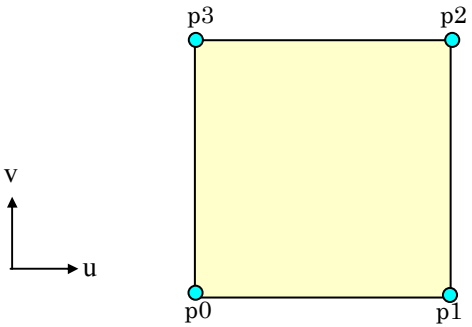
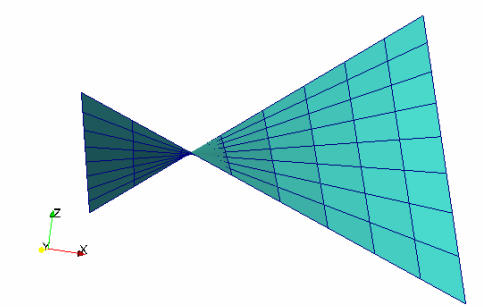
[operation]command

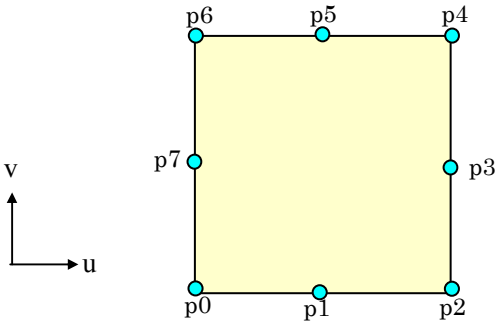
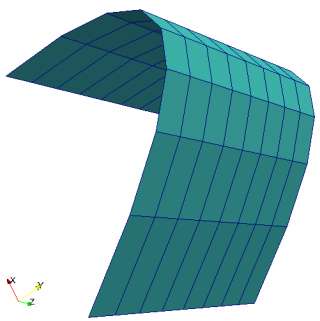
No	key	default value	contents of the value
1	input_name	no default	set name to create mesh
2	mesh_type	no default	only “quad”
3	u_div / v_div	1.0	the case specified by distance of base is defined as “base_size=2.0”.
4	mesh_name	no default	name of mesh

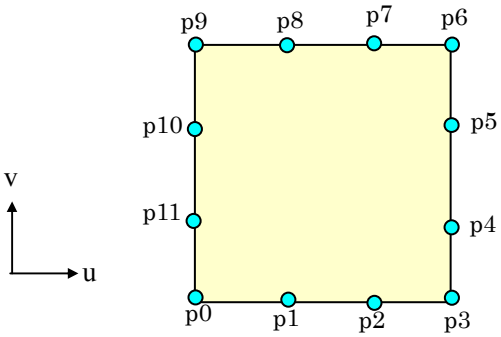
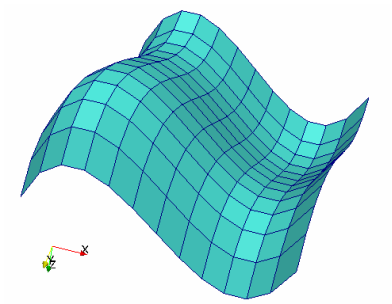
No	Case study	content	exsample source
2	trapezoid		[face] surface_type= bilinearSurface name=test1 <data> 0.0 0.0 0.0 1.0 0.0 0.0 0.8 0.5 0.0 0.4 0.5 0.0 </data> [operation] format = command <data> MESH_CREATE, input_name=test1,mesh_type=quad,u_div=3,v_div=3,mesh_name="AA" MESH_PRINT, input_mesh_name="AA", format=vtu, output_name="out.vtu" </data> No | key | default value | contents of the value 1 | surface_type | no default | bilinearSurface - 2 | data | no default | Trapezoid define 4 corner points.

No	Case study	content	exsample source
3	circle	 uniform : quadrangle element connected with the center of a circle is degenerated. nonuniform: a circle makeup five blocks. currently u_div and v_div must be same value. (boundary points of block do not merge.)	[shape] geometry_type=circle name=test radius=1 center=0.0 0.0 0.0 [operation] format = command <data> MESH_CREATE, input_name=test_type=quad, u_div=12,v_div=12, mesh_pattern=uniform,mesh_name="AA" MESH_PRINT, input_mesh_name="AA", format=vtu, output_name="out.vtu" </data> No | key | default value | contents of the value 1 | geometry_type | no default | circle 2 | radius | 1.0 | radius of circle 3 | center | origin (0.0,0.0,0.0) | center of circle 4 | mesh_pattern | uniform | either the following can be specified. *"uniform* "or "*nonuniform"*

No	Case study	content	exsample source
4	oval	 uniform : quadrangle element connected with the center of a oval is degenerated. nonuniform: currently nonuniform do not use.	[shape] geometry_type=oval name=test major_axis_radius=2 minor_axis_radius=1 center=2.0,0.0,0.0 [operation] format = command <data> MESH_CREATE, input_name=test,mesh_type=quad, u_div=6,v_div=6, mesh_pattern=uniform,mesh_name="AA" MESH_PRINT, input_mesh_name="AA", format=vtu, output_name="out.vtu" </data> No | key | default value | contents of the value 1 | geometry_type | no default | oval 2 | major_axis_radius minor_axis_radius | 1.0 | radius of oval 3 | center | origin (0.0,0.0,0.0) | center of oval 4 | mesh_pattern | uniform | only *"uniform "*

No	Case study	content	exsample source
5	bilinearSurface (Interpolation surface)	 define contrl points  sample of bilinear surface	[face] surface_type= bilinearSurface name=test <data> 0.0 0.0 0.0 1.0 0.0 -0.4 1.0 1.0 0.4 0.0 1.0 -0.4 </data> [operation] format = command <data> MESH_CREATE, input_name=test,mesh_type=quad,u_div=8,v_div=8,mesh_name="AA" MESH_PRINT, input_mesh_name="AA", format=vtu, output_name="out.vtu" </data> No | key | default value | contents of the value 1 | geometry_type | no default | bilinearSurface 2 | data | no default | set control point of surface (p0 ～ p3)

No	Case study	content	exsample source
6	quadricSurface (Interpolation surface)	  sample of quadric surface	[face] surface_type=quadricSurface name=test1 <data> 1.0 0.0 0.0 1.0 0.0 -0.5 1.0 0.0 -1.0 0.7 0.7 -1.0 0.0 0.0 -1.0 0.0 0.0 -0.5 0 0 0.0 0.0 0.7 0.7 0.0 </data> [operation] format = command <data> MESH_CREATE, input_name=test1,mesh_type=quad,u_div=8,v_div=8,mesh_name="AA" MESH_PRINT, input_mesh_name="AA", format=vtu, output_name="out.vtu" </data> No | key | default value | contents of the value 1 | geometry_type | no default | quadricSurface 2 | data | no default | set control point of surface (p0 ～ p7)

No	Case study	content	exsample source
7	cubicSurface (Interpolation surface)	  sample of cubic surface	[face] surface_type=cubicSurface name=test1 <data> 0.0 0.0 0.0 1.0 0.0 -0.5 2.0 0.0 0.5 3.0 0.0 0.0 3.0 1.0 0.0 3.0 2.0 -0.5 3.0 3.0 0.0 2.0 3.0 0.5 1.0 3.0 -0.5 0.0 3.0 0.0 0.0 2.0 -0.5 0.0 1.0 0.0 </data> [operation] format = command <data> MESH_CREATE, input_name=test1,mesh_type=quad,u_div=12,v_div=12,mesh_name="AA" MESH_PRINT, input_mesh_name="AA", format=vtu, output_name="out.vtu" </data> No | key | default value | contents of the value 1 | geometry_type | no default | cubicSurface 2 | data | no default | set control point of surface (p0 ～ p11)