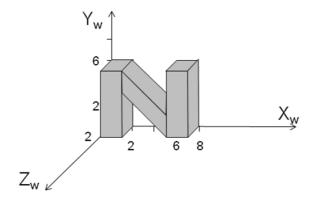
Graphics 2

CLASS EXERCISE: VIRTUAL CAMERA

February 2012

The figure below shows a sketch of an object:



Calculate perspective projection of the above object given its vertex table and the following viewing parameters:

- viewpoint at VRP = (12, 36, 22)
- direction of viewing: towards the point (2, 6, 2)
- viewing distance D = 10

	Vertex table					
V1	0	0	2	1		
V2	2	0	2	1		
V1 V2 V3 V4	2 2 0	0	0	1		
V4	0	0	0	1		
V5 V6 V7	0	6	2	1		
V6	2	6	2	1		
V7	2 2 0	6		1		
V8	0	6	0	1		
V9	6	0	2	1		
V9 V10 V11 V12	8	0	2	1		
V11	8	0	0	1		
V12	6	0	0	1		
V13	6	6	2	1		
V14	8	6		1		
V13 V14 V15 V16	8	6	0	1		
V16	6	6	0	1		

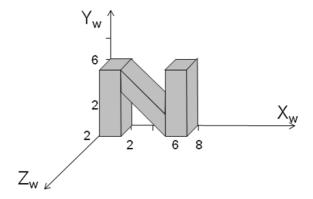
_			
race (aive	table n is ve	ertex nu	umber) 4 6 2 3 4 1 12 14 10 11
1	2	3	4
5	8	7	6
1	5	6	2
2	6	7	3
3	7	8	4
4	8	5	1
9	10	11	12
13	16	15	14
9	13	14	10
	17	10	11
11	15	16	12
12	16	13	9
6	7	11	10
5	6	10	9
8	5	9	12
7	11	12	8
1	2	3	4
11 12 6 5 8 7 1 5 1	2 8 2 8		6
1	2	3 7	4 6
5	8	7	6

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V6 V7 V8	2	6		1	
V7		6	0	1	
V8	0	6	0	1	
V9	6	0	2	1	
V10 V11	8	0	2	1	
V11	8	0	0	1	
V12	6	0	0	1	
V13	6	6	2	1	
V14	8	6	2 2 0	1	
V14 V15 V16	8	6		1	
V16	6	6	0	1	