

Student number	point total	req total	extra total	R0 UV (0.5p)	R1 ortho, ambient (1.5 p)	R2 Depth vis (1p)	R3 Perspective (1.5p)	R4 Phong, lights (3p)	R5 Planes (1p)	R6 Triangles (1.5p)	R7 Shadows (1.5p)	R8 Reflection (1.5p)	R9 AA (2p)	mod	notes / extras / ...	Refraction (1-2p)	Simple fog (1p)	More primitives (3p)	Arbitrary filters (1-3p)	Stereo cubemap (4p+)	transparent shadows (1.5p)	Fresnel (1p)	Textures (2-4p)	Normal mapping (2-3p)	CSG (4-5p)	other (points)	other (what)	
646927	6.5	6.5	0	0.5	0.5	0	0.5	1	1	1.5	0	1.5	0		Problems with projections(ray gen), Phong shading missing functionality. Greata job!													
648530	4.5	4.5	0	0.5	1.5	1	1.5	0	0	0	0	0	0															
648653	23	15	8	0.5	1.5	1	1.5	3	1	1.5	1.5	1.5	2														8 path tracing: 8	
650227	4.5	4.5	0	0.5	1.5	1	1.5																					
650492	12.5	12.5	0	0.5	1.5	1	1.5	3	0.5	1.5	1.5	1.5	0		R5: Not checking if ray is parallel to plane.													
652131	4.5	4.5	0	0.5	1.5	1	1.5	0	0	0	0	0	0															
652144	5	5	0	0.5	1.5	1	1	1							R4: Phong shading not implemented.													
652801	0	0	0																									
653101	0	0	0																									
653460	0	0	0																									
653509	14	14	0	0.5	1.5	1	1.5	2.5	0.5	1.5	1.5	1.5	2		R4 shade_back not implemented. R5 no parallel check.													
653758	0.5	0.5	0	0.5	0	0	0	0	0	0	0	0	0															
653897	15	15	0	0.5	1.5	1	1.5	3	1	1.5	1.5	1.5	2															
654579	14	14	0	0.5	1.5	1	1.5	2.5	0.5	1.5	1.5	1.5	2		R4 shade back not correct. R5 no parallel check. R1 some scaling forgotten.													
655691	4	4	0	0.5	1	1	1.5																					
656470	0	0	0																									
656991	14	14	0	0.5	1.5	1	1.5	3	0.5	1.5	1.5	1	2		R5 no parallel check.													
665131	0	0	0																									
666253	0	0	0																									
667171	0	0	0																									
672771	12.5	12.5	0	0.5	1.5	1	1.5	3	0.5	1.5	1.5	1.5			R5 no parallel check.													
673987	21	15	6	0.5	1.5	1	1.5	3	1	1.5	1.5	1.5	2			2		3				1						
675163	5.5	5.5	0	0.5	1.5	1	1.5	0	0.5	0.5	0	0	0		R5 no parallel check.													
675765	0	0	0																									
677721	0	0	0																									
689395	0	0	0																									
700436	0	0	0																									
706555	0	0	0																									
706003	3	3	0	0.5	1.5	1	0	0	0	0	0	0	0															
706045	7.5	7.5	0	0.5	1.5	1	1.5	3																				
706443	2	2	0	0.5	1.5	0	0	0	0	0	0	0	0															
706595	4.5	4.5	0	0.5	1.5	1	1.5	0	0	0	0	0	0															
706919	0	0	0																									
707138	8.5	8.5	0	0.5	1.5	1	1.5	3	0.5	0.5	0	0	0		R5 no parallel check.													
707277	0	0	0																									
707316	14.5	14.5	0	0.5	1.5	1	1.5	3	0.5	1.5	1.5	1.5	2		R5 no parallel check.													
707620	0	0	0																									
708616	5.5	5.5	0	0.5	1	1	1	2	0	0	0	0	0															
708988	0	0	0																									
709026	0	0	0																									
709178	12	12	0	0.5	1.5	0.5	1.5	2	0.5	1.5	1.5	1.5	1		R2 incorrect depth calculation. R5 no parallel check. AA jittered doesn't work correctly.													
709903	0	0	0																									
711111	15	15	0	0.5	1.5	1	1.5	3	1	1.5	1.5	1.5	2															
711218	15.5	13	2.5	0.5	1.5	1	1	2.5	1	1	1.5	1.5	1.5		R3 unnormalized ray. R4 no backside flag. Normals/lights dont work with transforms. Points for effort on refraction and fresnel. R2 points for partial implementation.	1		1			0.5							
711263	8	8	0	0.5	1.5	0	1.5	2	1	1.5																		
711810	4.5	4.5	0	0.5	1.5	1	1.5	0	0	0	0	0	0															
712039	4.5	4.5	0	0.5	1.5	1	1.5	0	0	0	0	0	0															
713601	0	0	0																									
713928	15	15	0	0.5	1.5	1	1.5	3	1	1.5	1.5	1.5	2															
714477	0	0	0																									
714574	10	10	0	0.5	1.5	1	1.5	3	1	1.5																		
716718	17	13.5	3.5	0.5	1.5	1	1.5	3	0.5	1.5	1.5	1	1.5		R5 no parallel check. R8 idea correct, but not rendering correctly. R9 regular sampler offset not correct.	2		1.5										

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716792	3	3	0	0.5	1	0	0.5	0.5	0.5						R1 point for effort. R2 not correct. R3 points for effort. R4 points for effort. R5 denominator calculated wrong.												
717377	0	0	0																								
729637	9.5	9.5	0	0.5	1.5	1	1.5	3	1	1	0	0	0														
730105	12	12	0	0.5	1.5	1	1.5	2.5	0.5	1.5	1.5	1.5	1.5	0	R4 missing shade, back implementation. R5 no parallel check.												
730448	14.5	14.5	0	0.5	1.5	1	1.5	3	0.5	1.5	1.5	1.5	2		R5: Not checking if ray is parallel to plane.												
730969	1.5	1.5	0	0.5	1	0	0	0	0	0	0	0	0														
732381	0	0	0																								
763282	10	10	0	0	1.5	1	1.5	2.5	0.5	1.5	1.5	0	0		R4 shade back missing. R5 missing parallel check. R5 no parallel check.												
765662	11	11	0	0.5	1.5	1	1.5	3	0.5	1.5	1.5	0	0														
766108	0	0	0																								
768902	0	0	0																								
770084	6	6	0	0.5	1.5	1	1.5	1.5	0	0	0	0	0														
772040	14.5	14.5	0	0.5	1.5	1	1.5	3	0.5	1.5	1.5	1.5	2		R5 no parallel check.												
778109	12.5	12.5	0	0.5	1.5	1	1.5	3	0.5	1.5	1.5	1.5	0		R5: Not checking if ray is parallel to plane.												
779661	0	0	0																								
779599	8	8	0	0.5	1.5	1	1.5	3	0.5	0	0	0	0			R5 no parallel check.											
780210	15	15	0	0.5	1.5	1	1.5	3	1	1.5	1.5	1.5	2														
780223	15	14	1	0.5	1.5	1	1.5	3	0	1.5	1.5	1.5	2		R5: Incorrect plane intersection.		1										
781468	0	0	0																								
781866	14	14	0	0.5	1.5	1	1.5	2.5	0.5	1.5	1.5	1.5	2		R4: Not clamping dot product of normal and ray direction to positive. R5: Error in plane intersection math.												
782124	0	0	0																								
782162	0	0	0																								
782357	6.5	6.5	0	0.5	1.5	1	1.5	1.5	0.5	0	0	0	0		R5: Not checking if ray is parallel to plane.												
782700	4.5	4.5	0	0.5	1.5	1	1.5	0	0	0	0	0	0														
783288	14.5	13.5	1	0.5	1.5	0.5	1.5	2.5	0.5	1.5	1.5	1.5	2			R2 depth vis not using args values. R3 almost correct. R5 no parallel check. Refraction close to correct.		1									
783301	0	0	0																								
783366	0	0	0																								
785707	3	3	0	0.5	1	0.5	1	0	0	0	0	0	0	0													
786146	0.5	0.5	0	0.5	0	0	0	0	0	0	0	0	0	0													
786874	0	0	0																								
787226	0	0	0																								
788254	43	15	28	0.5	1.5	1	1.5	3	1	1.5	1.5	1.5	2		Great work!		2		3			1					
788539	11	11	0	0.5	1.5	1	1.5	3	0.5	1.5	1.5				R5 no parallel check.												
788788	0	0	0																								
789017	0	0	0																								
791610	7	7	0	0	1.5	1	1.5	2.5	0.5	0	0	0	0		R5 no parallel check.												
791678	0	0	0																								
793621	2	2	0	0.5	1.5																						
795658	0	0	0																								
795755	0	0	0																								
																										BVH 3p: BRDF 3p: Tone mapping and gamma correction 2p: Local / direct illumination integration 4p: Global illumination distribution tracing 5p: Global illumination importance 22 sampling 5p	

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818409 819754	14.5 0	14.5 0	0 0	0.5	1.5	1	1.5	3	0.5	1.5	1.5	1.5	2		R5: Not checking if ray is parallel to plane.												
829948	2	2	0	0.5	1.5	0	0	0	0	0	0	0	0		R2 not working correctly. No inverse mapping. R5 no parallel plane check. Refraction point for effort.												
831907	15.5	14.5	1	0.5	1.5	1	1.5	3	0.5	1.5	1.5	1.5	2		R2 depth vis calculation wrong. R4 no shade, back handling. R5 no parallel plane check. R7 shadows not implemented.	1											
838191 853723	8.5 0	8.5 0	0 0	0.5	1.5	0.5	1.5	2.5	0.5	0	0	1.5			R2 almost correct. R4 not fully implemented. R5 & R6 points for effort.												
871831 882972 883353 885665	7 0 0 8.5	7 0 0 8.5	0 0 0 0	0.5 0 0 0.5	1.5 0 0 1.5	0.5 0 0 1	1.5 0 0 1.5	2 0 0 3	0.5 0 0 1	0.5 0 0 0	0 0 0 0		0 0 0 0														
887799	12.5	12.5	0	0.5	1.5	1	1.5	3	0.5	0.5	1.5	1.5	1		R5 no parallel celsh. R6 missing normals. All images have an error with projection/ray generation. 1.0 points off from R1 and R3.												
892179 892292	11 0	11 0	0 0	0.5	0.5	1	0.5	3	1	1.5	1.5	1.5	0		R0 using width for both i and j. R1 depth variable uninitialized -> random behaviour otherwise correct. R5 no parallel check.												
892412 892690	15 4.5	13.5 4.5	1.5 0	0 0.5	1.5 1.5	0.5 1	1.5 1.5	3 0	0.5 0	1.5 0	1.5 0	1.5 0	2 0		R4: Phong shading not computing diffuse color at ray intersection point. R5: Not checking if ray is parallel to plane.			1.5									
897572 897925 903929	14 7.5 0	14 7.5 0	0 0 0	0.5 0.5 0	1.5 1.5 0	1 1	1.5 1.5	2.5 3	0.5 0	1.5 0	1.5 0	1.5 0	2 0														
905833	14.5	14.5	0	0.5	1.5	1	1.5	3	1	1	1.5	1.5	2		R6 not quite working. R5 no parallel check.												
906971 913488 913511 913540 943413 952352	14 20 0 0 0 0	14 15 0 0 0 0	0 5 0 0 0 0	0.5 0.5 0 0 0 0	1.5 1.5 0 0 0 0	1 1	1.5 1.5	2.5 3	0.5 1	1.5 1.5	1.5 1.5	1.5 1.5	2 2				2		3								
963354	16	14.5	1.5	0.5	1.5	1	1.5	3	0.5	1.5	1.5	1.5	2		R5 no parallel check. R4 missing shade, back/sp ecular lobe check. R5 no parallel check.			1.5									
976260	15.5	14	1.5	0.5	1.5	1	1.5	2.5	0.5	1.5	1.5	1.5	2					1.5									
976503	27.5	15	12.5	0.5	1.5	1	1.5	3	1	1.5	1.5	1.5	2		Great job!	2		1.5									
995212	13.5	13.5	0	0.5	1.5	1	1.5	3	0.5	1.5	1.5	1.5	1		R5 no parallel check R5 no parallel check. R6 intensity drops, some problems with averaging. Samplers work.												
995270	14	14	0	0.5	1.5	1.5	1.5	3	0.5	1.5	1.5	1.5	1		R5: Not checking if ray is parallel to plane.												
995319	12.5	12.5	0	0.5	1.5	1	1.5	3	0.5	1.5	1.5	1.5	0		R5 no parallel check. R6 jittered aa not working. R5 no parallel check.												
995762	14	14	0	0.5	1.5	1	1.5	3	0.5	1.5	1.5	1.5	1.5														
998743 999263 1000203 1001163	9.5 0 0 5	9.5 0 0 5	0 0 0 0	0.5 0 0 0.5	1.5 0 0 1.5	1 0	1.5 1.5	3	0.5 0	1.5 0	1.5 0	1.5 0	0 0														
																										moving objects: 3. lorentz:3. length 9 contraction: 3	

[illegible]