We were able to prove that the inverted matrix, M^{-1} exists. Since M is a square matrix with a dimension size of 4 by 4, that means that it should be an invertible matrix. To find the inverted matrix, we used Gaussian elimination. Since M was nearly in an identity matrix form, all we had to do was deal with the d values. This gave us a resulting inverse matrix that was nearly identical to M but with the d values being negative rather than positive.

Comparing this matrix to an M_{-d} matrix, where the d value is set to a negative value, we can see that M^{-1} is equivalent to M_{-d}. This equivalence does make sense considering how they are used. In the equation provided to us, we are taking a resulting set of rays, presumably obtained by multiplying the original rays by M, and multiplying it by the inverse of M to re-obtain our original rays. The product in this case would effectively be going backwards by our selected distance. M_{-d} would be the same process. It would be the rays processed through a backwards distance just like M^{-1}.

Taking our new matrix, we used it to process the lightfield dataset. By propagating the rays through our inverted matrix with a selected distance of 1, we managed to obtain a shockingly clear and detailed image, one far greater than the image of part 2. We can now see that the object we have been ray tracing from was a planet that appears to have been Saturn the whole time.