**Verifying streaming part**

For velocity 0**i** + 0**j** + 0**k**

|  |  |
| --- | --- |
| t = 0  0.0 0.15 0.3 0.45 0.6 0.75 0.9 1.05 1.2 1.35  1.5 **1.65** 1.8 1.95 2.1 2.25 2.4 2.55 2.7 2.85  3.0 3.15 3.3 3.45 3.6 3.75 3.9 4.05 4.2 4.35  4.5 4.65 4.8 4.95 5.1 5.25 5.4 5.55 5.7 5.85  6.0 6.15 6.3 6.45 6.6 6.75 6.9 7.05 7.2 7.35  7.5 7.65 7.8 7.95 8.1 8.25 8.4 8.55 8.7 8.85  9.0 9.15 9.3 9.45 9.6 9.75 9.9 10.05 10.2 10.35  10.5 10.65 10.8 10.95 11.1 11.25 11.4 **11.55** 11.7 11.85  12.0 12.15 12.3 12.45 12.6 12.75 12.9 13.05 13.2 13.35  13.5 13.65 13.8 13.95 14.1 14.25 14.4 14.55 14.7 14.85 | t = 1  0.0 0.15 0.3 0.45 0.6 0.75 0.9 1.05 1.2 1.35  1.5 **1.65** 1.8 1.95 2.1 2.25 2.4 2.55 2.7 2.85  3.0 3.15 3.3 3.45 3.6 3.75 3.9 4.05 4.2 4.35  4.5 4.65 4.8 4.95 5.1 5.25 5.4 5.55 5.7 5.85  6.0 6.15 6.3 6.45 6.6 6.75 6.9 7.05 7.2 7.35  7.5 7.65 7.8 7.95 8.1 8.25 8.4 8.55 8.7 8.85  9.0 9.15 9.3 9.45 9.6 9.75 9.9 10.05 10.2 10.35  10.5 10.65 10.8 10.95 11.1 11.25 11.4 **11.55** 11.7 11.85  12.0 12.15 12.3 12.45 12.6 12.75 12.9 13.05 13.2 13.35  13.5 13.65 13.8 13.95 14.1 14.25 14.4 14.55 14.7 14.85 |
| t = 3  0.0 0.15 0.3 0.45 0.6 0.75 0.9 1.05 1.2 1.35  1.5 **1.65** 1.8 1.95 2.1 2.25 2.4 2.55 2.7 2.85  3.0 3.15 3.3 3.45 3.6 3.75 3.9 4.05 4.2 4.35  4.5 4.65 4.8 4.95 5.1 5.25 5.4 5.55 5.7 5.85  6.0 6.15 6.3 6.45 6.6 6.75 6.9 7.05 7.2 7.35  7.5 7.65 7.8 7.95 8.1 8.25 8.4 8.55 8.7 8.85  9.0 9.15 9.3 9.45 9.6 9.75 9.9 10.05 10.2 10.35  10.5 10.65 10.8 10.95 11.1 11.25 11.4 **11.55** 11.7 11.85  12.0 12.15 12.3 12.45 12.6 12.75 12.9 13.05 13.2 13.35  13.5 13.65 13.8 13.95 14.1 14.25 14.4 14.55 14.7 14.85 | t = 4  0.0 0.15 0.3 0.45 0.6 0.75 0.9 1.05 1.2 1.35  1.5 **1.65** 1.8 1.95 2.1 2.25 2.4 2.55 2.7 2.85  3.0 3.15 3.3 3.45 3.6 3.75 3.9 4.05 4.2 4.35  4.5 4.65 4.8 4.95 5.1 5.25 5.4 5.55 5.7 5.85  6.0 6.15 6.3 6.45 6.6 6.75 6.9 7.05 7.2 7.35  7.5 7.65 7.8 7.95 8.1 8.25 8.4 8.55 8.7 8.85  9.0 9.15 9.3 9.45 9.6 9.75 9.9 10.05 10.2 10.35  10.5 10.65 10.8 10.95 11.1 11.25 11.4 **11.55** 11.7 11.85  12.0 12.15 12.3 12.45 12.6 12.75 12.9 13.05 13.2 13.35  13.5 13.65 13.8 13.95 14.1 14.25 14.4 14.55 14.7 14.85 |

g value both bolded and green are staying in the same position. Hence streaming correct for this velocity

For velocity **i** + 0**j** + 0**k**

|  |  |
| --- | --- |
| t = 0  0.01 0.16 0.31 0.46 0.61 0.76 0.91 1.06 1.21 1.36  1.51 1.66 1.81 **1.96** 2.11 2.26 2.41 2.56 2.71 2.86  3.01 3.16 3.31 3.46 3.61 3.76 3.91 4.06 4.21 4.36  4.51 4.66 4.81 4.96 5.11 5.26 5.41 5.56 5.71 5.86  6.01 6.16 6.31 6.46 6.61 6.76 6.91 7.06 7.21 7.36  7.51 7.66 7.81 7.96 8.11 8.26 8.41 8.56 8.71 8.86  9.01 9.16 9.31 9.46 9.61 9.76 9.91 10.06 10.21 10.36  10.51 10.66 10.81 10.96 11.11 11.26 11.41 11.56 11.71 11.86  12.01 12.16 12.31 12.46 12.61 12.76 12.91 13.06 13.21 13.36  13.51 13.66 13.81 13.96 14.11 14.26 14.41 14.56 14.71 14.86 | t = 1  1.36 0.01 0.16 0.31 0.46 0.61 0.76 0.91 1.06 1.21  2.86 1.51 1.66 1.81 **1.96** 2.11 2.26 2.41 2.56 2.71  4.36 3.01 3.16 3.31 3.46 3.61 3.76 3.91 4.06 4.21  5.86 4.51 4.66 4.81 4.96 5.11 5.26 5.41 5.56 5.71  7.36 6.01 6.16 6.31 6.46 6.61 6.76 6.91 7.06 7.21  8.86 7.51 7.66 7.81 7.96 8.11 8.26 8.41 8.56 8.71  10.36 9.01 9.16 9.31 9.46 9.61 9.76 9.91 10.06 10.21  11.86 10.51 10.66 10.81 10.96 11.11 11.26 11.41 11.56 11.71  13.36 12.01 12.16 12.31 12.46 12.61 12.76 12.91 13.06 13.21  14.86 13.51 13.66 13.81 13.96 14.11 14.26 14.41 14.56 14.71 |
| t = 2  1.21 1.36 0.01 0.16 0.31 0.46 0.61 0.76 0.91 1.06  2.71 2.86 1.51 1.66 1.81 **1.96** 2.11 2.26 2.41 2.56  4.21 4.36 3.01 3.16 3.31 3.46 3.61 3.76 3.91 4.06  5.71 5.86 4.51 4.66 4.81 4.96 5.11 5.26 5.41 5.56  7.21 7.36 6.01 6.16 6.31 6.46 6.61 6.76 6.91 7.06  8.71 8.86 7.51 7.66 7.81 7.96 8.11 8.26 8.41 8.56  10.21 10.36 9.01 9.16 9.31 9.46 9.61 9.76 9.91 10.06  11.71 11.86 10.51 10.66 10.81 10.96 11.11 11.26 11.41 11.56  13.21 13.36 12.01 12.16 12.31 12.46 12.61 12.76 12.91 13.06  14.71 14.86 13.51 13.66 13.81 13.96 14.11 14.26 14.41 14.56 | t = 3  1.06 1.21 1.36 0.01 0.16 0.31 0.46 0.61 0.76 0.91  2.56 2.71 2.86 1.51 1.66 1.81 **1.96** 2.11 2.26 2.41  4.06 4.21 4.36 3.01 3.16 3.31 3.46 3.61 3.76 3.91  5.56 5.71 5.86 4.51 4.66 4.81 4.96 5.11 5.26 5.41  7.06 7.21 7.36 6.01 6.16 6.31 6.46 6.61 6.76 6.91  8.56 8.71 8.86 7.51 7.66 7.81 7.96 8.11 8.26 8.41  10.06 10.21 10.36 9.01 9.16 9.31 9.46 9.61 9.76 9.91  11.56 11.71 11.86 10.51 10.66 10.81 10.96 11.11 11.26 11.41  13.06 13.21 13.36 12.01 12.16 12.31 12.46 12.61 12.76 12.91  14.56 14.71 14.86 13.51 13.66 13.81 13.96 14.11 14.26 14.41 |

The bolded number **1.96** and 6.76 are each moving one place towards right as expected

For velocity **i** + **j** + **k**

*Note that positive y direction is downwards*

|  |  |
| --- | --- |
| t = 0  0.07 0.22 0.37 0.52 0.67 0.82 0.97 1.12 1.27 1.42  1.57 1.72 1.87 2.02 2.17 2.32 2.47 2.62 2.77 2.92  3.07 3.22 3.37 3.52 3.67 3.82 3.97 4.12 4.27 4.42  4.57 4.72 4.87 5.02 5.17 5.32 5.47 5.62 5.77 5.92  6.07 **6.22** 6.37 6.52 6.67 6.82 6.97 7.12 7.27 7.42  7.57 7.72 7.87 8.02 8.17 8.32 8.47 8.62 8.77 8.92  9.07 9.22 9.37 9.52 9.67 9.82 9.97 10.12 10.27 10.42  10.57 10.72 10.87 11.02 11.17 11.32 11.47 11.62 11.77 11.92  12.07 12.22 12.37 12.52 12.67 12.82 12.97 13.12 13.27 13.42  13.57 13.72 13.87 14.02 14.17 14.32 14.47 14.62 14.77 14.92 | t = 1  14.92 13.57 13.72 13.87 14.02 14.17 14.32 14.47 14.62 14.77  1.42 0.07 0.22 0.37 0.52 0.67 0.82 0.97 1.12 1.27  2.92 1.57 1.72 1.87 2.02 2.17 2.32 2.47 2.62 2.77  4.42 3.07 3.22 3.37 3.52 3.67 3.82 3.97 4.12 4.27  5.92 4.57 4.72 4.87 5.02 5.17 5.32 5.47 5.62 5.77  7.42 6.07 **6.22** 6.37 6.52 6.67 6.82 6.97 7.12 7.27  8.92 7.57 7.72 7.87 8.02 8.17 8.32 8.47 8.62 8.77  10.42 9.07 9.22 9.37 9.52 9.67 9.82 9.97 10.12 10.27  11.92 10.57 10.72 10.87 11.02 11.17 11.32 11.47 11.62 11.77  13.42 12.07 12.22 12.37 12.52 12.67 12.82 12.97 13.12 13.27 |
| t = 2  13.27 13.42 12.07 12.22 12.37 12.52 12.67 12.82 12.97 13.12  14.77 14.92 13.57 13.72 13.87 14.02 14.17 14.32 14.47 14.62  1.27 1.42 0.07 0.22 0.37 0.52 0.67 0.82 0.97 1.12  2.77 2.92 1.57 1.72 1.87 2.02 2.17 2.32 2.47 2.62  4.27 4.42 3.07 3.22 3.37 3.52 3.67 3.82 3.97 4.12  5.77 5.92 4.57 4.72 4.87 5.02 5.17 5.32 5.47 5.62  7.27 7.42 6.07 **6.22** 6.37 6.52 6.67 6.82 6.97 7.12  8.77 8.92 7.57 7.72 7.87 8.02 8.17 8.32 8.47 8.62  10.27 10.42 9.07 9.22 9.37 9.52 9.67 9.82 9.97 10.12  11.77 11.92 10.57 10.72 10.87 11.02 11.17 11.32 11.47 11.62 | t = 3  11.62 11.77 11.92 10.57 10.72 10.87 11.02 11.17 11.32 11.47  13.12 13.27 13.42 12.07 12.22 12.37 12.52 12.67 12.82 12.97  14.62 14.77 14.92 13.57 13.72 13.87 14.02 14.17 14.32 14.47  1.12 1.27 1.42 0.07 0.22 0.37 0.52 0.67 0.82 0.97  2.62 2.77 2.92 1.57 1.72 1.87 2.02 2.17 2.32 2.47  4.12 4.27 4.42 3.07 3.22 3.37 3.52 3.67 3.82 3.97  5.62 5.77 5.92 4.57 4.72 4.87 5.02 5.17 5.32 5.47  7.12 7.27 7.42 6.07 **6.22** 6.37 6.52 6.67 6.82 6.97  8.62 8.77 8.92 7.57 7.72 7.87 8.02 8.17 8.32 8.47  10.12 10.27 10.42 9.07 9.22 9.37 9.52 9.67 9.82 9.97 |

It can be seen that each g is moving one step ahead in both x and y axis. Here length in z axis is only one