Task 1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Bessel 1841 | WGS 84 | PZ-90.11 | Sphere |
| A | x | 4156936.717632641 | 4157442.456412987 | 4157441.788218237 | 4149473.951919951 |
| y | 671994.6081663178 | 672076.363977536 | 672076.2559597095 | 670788.2057932279 |
| z | 4773907.774053376 | 4774392.710820151 | 4774392.010239912 | 4797355.521045582 |
| B | x | 134958.56759491365 | 134975.57694047244 | 134975.5548358239 | 134520.3681131102 |
| y | 21816.88967381729 | 21819.63934004518 | 21819.635766691612 | 21746.052009191764 |
| z | 6354918.291149632 | 6355591.613847821 | 6355590.661893005 | 6376844.224989719 |

Task 2

a)

GPST=TAI-19s=UTC+18s=CET-1h+18s=2078w 370818s

GLONASST=UTC(SU)+3h=GPST+3h-18s=07.11.2019, 10:00:00

GST=TAI-19s=07.11.2019, 07:00:18

b)

UTC=GPST-18s=12.11.2019, 08:29:42

CET=UTC+1h=12.11.2019, 09:29:42

Task 3

T=194418.000s/week=6h 0m 18s

c=299792458 m/s

a)

D=c\*(T-t)=209854720.6 m

b)

D=c\*(T-t0.001s)=209854720.6 299792.458m