Données pour les étudiants

### Exercice 1 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.42984186 | 1.29153462 | 3.93848174 | 66.093134 |
| 2 | 1.55110892 | 0.67189275 | 3.80881679 | 68.621316 |
| 3 | 0.85121689 | 2.07294610 | 3.51323048 | 68.995238 |
| 4 | 2.26308272 | 1.99982038 | 2.87117382 | 73.067967 |

### Exercice 2 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.13129342 | 2.07401053 | 3.61188406 | 5.262449 |
| 2 | -0.10698109 | 0.90848642 | 4.06542391 | 0.086957 |
| 3 | -0.02432922 | 1.13405574 | 4.00971193 | 1.188442 |
| 4 | 0.69851328 | 1.49029730 | 3.82825773 | 3.368297 |

### Exercice 3 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.12723034 | 1.00307269 | 3.88428385 | 87.270198 |
| 2 | 1.30262568 | 1.59900570 | 3.62088542 | 85.419858 |
| 3 | 0.36795612 | 1.90321033 | 3.68874814 | 85.374512 |
| 4 | 0.40216926 | 1.53499891 | 3.85311592 | 86.330065 |

### Exercice 4 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.79691908 | 1.79625806 | 2.51299915 | 50.376728 |
| 2 | 2.53559354 | 2.70017695 | 1.90899814 | 48.399080 |
| 3 | 3.02581647 | 2.21178645 | 1.82123570 | 48.260078 |
| 4 | 2.91099093 | 1.38963485 | 2.63808849 | 50.472567 |

### Exercice 5 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.93538432 | 0.64452715 | 2.88661874 | 17.869009 |
| 2 | 3.39775006 | 0.05215748 | 2.41185369 | 17.407943 |
| 3 | 2.73534494 | -0.14491198 | 3.14027907 | 18.128415 |
| 4 | 3.01566096 | 0.00178384 | 2.87580422 | 18.054443 |

### Exercice 6 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.52788018 | 0.84859972 | 3.78284612 | 24.947172 |
| 2 | 0.05738675 | 0.80486330 | 4.08819837 | 26.911408 |
| 3 | 0.14643691 | 0.12054856 | 4.16275010 | 29.902693 |
| 4 | -0.06935665 | 0.39029618 | 4.14817100 | 28.451608 |

### Exercice 7 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.94043845 | 0.96412008 | 2.79083469 | 18.061915 |
| 2 | 3.06219983 | 0.61991154 | 2.75737302 | 18.133925 |
| 3 | 2.61309642 | -0.66056651 | 3.17802503 | 16.463690 |
| 4 | 1.89891028 | 0.19011881 | 3.70438371 | 16.263211 |

### Exercice 8 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.44597297 | 0.98341356 | 3.78239660 | 8.944832 |
| 2 | -0.05170134 | 1.47375665 | 3.89741355 | 11.476230 |
| 3 | -1.93564022 | 1.42139854 | 3.40549368 | 6.994775 |
| 4 | -0.91850453 | 0.89515824 | 3.96478313 | 10.410373 |

### Exercice 9 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.07116383 | 1.00977470 | 4.04224626 | 29.216993 |
| 2 | -1.24489023 | 0.40337567 | 3.95626092 | 27.452282 |
| 3 | 0.66770539 | 0.19733432 | 4.10849033 | 24.218240 |
| 4 | -0.83485796 | 0.91217364 | 3.97937376 | 29.612770 |

### Exercice 10 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.56769561 | 2.51178464 | 2.11242544 | 50.889444 |
| 2 | 2.61556885 | 2.87190770 | 1.50844617 | 48.638461 |
| 3 | 2.70441968 | 2.27701363 | 2.20585294 | 51.261911 |
| 4 | 2.78192782 | 2.21635883 | 2.17096644 | 51.163818 |

### Exercice 11 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.29839290 | 1.86711657 | 3.71339487 | 34.390524 |
| 2 | -0.61061513 | 1.03337793 | 3.99045653 | 29.752486 |
| 3 | 0.74179942 | 1.55359198 | 3.79480562 | 33.435603 |
| 4 | 0.26443779 | 1.83731133 | 3.73079399 | 34.239264 |

### Exercice 12 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.82511283 | 0.91454865 | 3.98086092 | 103.193615 |
| 2 | -0.30254515 | 0.91172029 | 4.05483620 | 101.625318 |
| 3 | -0.47047570 | 1.89926148 | 3.67911980 | 97.712761 |
| 4 | 0.07925407 | -0.29708578 | 4.15570968 | 107.271049 |

### Exercice 13 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.02542027 | 0.63291826 | 3.98903395 | 7.137601 |
| 2 | 2.02555294 | 1.26946623 | 3.41321767 | 11.765348 |
| 3 | 2.09450854 | 0.38580420 | 3.58171093 | 10.100074 |
| 4 | 1.94375683 | 1.58486544 | 3.32783338 | 12.011285 |

### Exercice 14 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.14879695 | 2.17851804 | 2.82863835 | 10.974039 |
| 2 | 2.13191110 | 1.47626540 | 3.26191042 | 11.704014 |
| 3 | 2.81156738 | 2.07655380 | 2.26880525 | 9.644014 |
| 4 | 2.80624178 | 1.47602309 | 2.70385410 | 10.633827 |

### Exercice 15 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.54853663 | 1.34767296 | 3.62633093 | 35.206072 |
| 2 | 2.14358930 | 0.67024709 | 3.51002249 | 35.713622 |
| 3 | 0.67348473 | 0.71216600 | 4.05014839 | 30.764239 |
| 4 | 1.88807668 | 1.14701397 | 3.53326895 | 35.942164 |

### Exercice 16 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.23635624 | -0.94654483 | 4.05125323 | 71.296375 |
| 2 | -0.83525808 | -1.22125548 | 3.89555427 | 72.318987 |
| 3 | -0.20772292 | -1.22596168 | 3.97722683 | 72.598296 |
| 4 | 0.16208576 | -1.51338374 | 3.87915738 | 74.029574 |

### Exercice 17 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.24727157 | 0.86932635 | 4.06787322 | 85.068671 |
| 2 | 0.68808802 | 0.78688336 | 4.03383360 | 84.039130 |
| 3 | -0.68783520 | 0.84563636 | 4.02197041 | 86.089616 |
| 4 | -0.31790882 | -0.02550083 | 4.15484630 | 81.337029 |

### Exercice 18 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -2.43695956 | 0.95856441 | 3.24142661 | 63.864689 |
| 2 | -2.53787531 | 2.08835046 | 2.56172703 | 65.944663 |
| 3 | -2.21203680 | 2.12723434 | 2.81890605 | 65.799876 |
| 4 | -2.41969405 | 1.81365889 | 2.86708671 | 65.602168 |

### Exercice 19 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.93478943 | -1.79426244 | 3.64297339 | 29.898680 |
| 2 | -0.38621595 | -1.84597474 | 3.71586849 | 30.160474 |
| 3 | -0.10511573 | -1.36782152 | 3.93477815 | 27.988567 |
| 4 | -0.10289623 | -1.73026548 | 3.78946670 | 29.703337 |

### Exercice 20 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 3.15824972 | 0.33123554 | 2.69818565 | 5.119087 |
| 2 | 3.36753775 | -0.13588091 | 2.45065093 | 4.711654 |
| 3 | 3.39285650 | -0.27035174 | 2.40414200 | 4.566139 |
| 4 | 2.89642738 | 0.21697001 | 2.98799206 | 5.407901 |

### Exercice 21 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.79586915 | 0.93749396 | 2.94426304 | 23.284072 |
| 2 | 0.83570644 | 1.00235833 | 3.95744066 | 18.012246 |
| 3 | 1.67463629 | 1.16656607 | 3.63306771 | 21.177810 |
| 4 | 1.67965792 | 1.53917171 | 3.48914944 | 21.928902 |

### Exercice 22 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.45205447 | 0.83222627 | 3.81620248 | 34.677391 |
| 2 | -0.54525854 | 0.90752959 | 4.03032843 | 35.335205 |
| 3 | -0.43797230 | 0.87235152 | 4.05112912 | 35.603268 |
| 4 | 0.69203758 | 0.65814814 | 4.05615447 | 38.022974 |

### Exercice 23 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.51476874 | -0.48503323 | 3.28711805 | 32.798094 |
| 2 | 3.35719529 | 0.71363298 | 2.36314025 | 31.365339 |
| 3 | 3.35222520 | 0.06294112 | 2.47448757 | 32.002680 |
| 4 | 3.01209911 | 0.55447248 | 2.82564741 | 32.339156 |

### Exercice 24 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.93851199 | 1.59798179 | 3.32461871 | 53.286305 |
| 2 | 1.43836781 | 1.05862599 | 3.76495327 | 51.721706 |
| 3 | 2.14347978 | 1.56713380 | 3.21154950 | 53.617890 |
| 4 | 1.96374303 | 2.04577772 | 3.05335404 | 53.302102 |

### Exercice 25 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.38462347 | 0.17203744 | 4.14571248 | 75.048693 |
| 2 | -0.75535012 | 1.25038848 | 3.90261950 | 69.191802 |
| 3 | -0.17129556 | 0.60911280 | 4.11875024 | 72.431786 |
| 4 | -0.05064564 | -0.28006034 | 4.15733873 | 76.427674 |

### Exercice 26 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 3.02921218 | 0.57781951 | 2.80258136 | 19.144245 |
| 2 | 2.71002451 | 0.58743236 | 3.11049103 | 18.977584 |
| 3 | 2.72072622 | -0.68304690 | 3.08148663 | 17.544356 |
| 4 | 2.68959916 | 0.94800067 | 3.03839023 | 18.944589 |

### Exercice 27 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.33468754 | 1.03787445 | 4.02184845 | 53.567560 |
| 2 | -1.00514624 | 0.42880850 | 4.02122723 | 55.248743 |
| 3 | 0.22037474 | 1.83826636 | 3.73318575 | 51.271038 |
| 4 | -0.39323851 | 0.62249710 | 4.10150276 | 55.159526 |

### Exercice 28 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.05158888 | 0.32717340 | 4.15388496 | 82.465164 |
| 2 | 0.54744562 | 1.92348389 | 3.65581415 | 89.589115 |
| 3 | -0.00514734 | 1.16836514 | 3.99992006 | 86.697033 |
| 4 | 0.12346904 | 0.84529532 | 4.07856535 | 84.934054 |

### Exercice 29 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.77924751 | 0.79983652 | 3.68225528 | 46.030914 |
| 2 | 2.13004639 | -0.32630919 | 3.56663550 | 47.741283 |
| 3 | 2.52458772 | -0.17258939 | 3.31076031 | 48.736642 |
| 4 | 2.34887571 | 0.60030858 | 3.38922950 | 47.875349 |

### Exercice 30 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.78950774 | -1.27961390 | 2.81881161 | 108.164214 |
| 2 | 2.04017337 | -1.41422430 | 3.34695778 | 108.981333 |
| 3 | 2.59260706 | -1.09286327 | 3.07384167 | 108.477824 |
| 4 | 2.23011366 | -1.49487564 | 3.18691135 | 108.643792 |

### Exercice 31 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.92909260 | 2.80744027 | 2.93590363 | 13.906675 |
| 2 | -0.17068632 | 3.06994897 | 2.81260442 | 12.884087 |
| 3 | -1.18607946 | 2.67859061 | 2.96358431 | 14.011788 |
| 4 | -0.14574972 | 2.90019620 | 2.98865908 | 12.813851 |

### Exercice 32 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.37930608 | 1.86974722 | 3.70467763 | 74.368142 |
| 2 | 1.17263974 | 1.95567085 | 3.48779754 | 73.491492 |
| 3 | 0.82581515 | 1.87111710 | 3.63062174 | 73.948165 |
| 4 | 0.58387134 | 1.70589616 | 3.75679074 | 74.595540 |

### Exercice 33 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.09743184 | 0.07682476 | 4.01922945 | 46.403869 |
| 2 | -0.20054435 | 0.98878408 | 4.04308695 | 43.697225 |
| 3 | -0.53436794 | 1.22977240 | 3.94544989 | 42.353952 |
| 4 | -0.31878422 | 0.91666837 | 4.05247576 | 43.834377 |

### Exercice 34 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 3.75688447 | 0.30551074 | 1.77677977 | 58.377508 |
| 2 | 2.56810168 | -0.98121192 | 3.13153972 | 60.579532 |
| 3 | 3.43149567 | 1.00154492 | 2.14154368 | 58.806736 |
| 4 | 3.40700564 | 0.69963296 | 2.29505782 | 59.525540 |

### Exercice 35 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.88308803 | -1.94384295 | 3.57856036 | 28.762068 |
| 2 | -0.13769707 | -0.88481518 | 4.06971814 | 23.797942 |
| 3 | -0.97629020 | -1.90660349 | 3.57437892 | 28.277032 |
| 4 | 0.87557300 | -1.66334270 | 3.71902233 | 27.474256 |

### Exercice 36 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.93448797 | -0.10180288 | 4.05965916 | 13.740214 |
| 2 | 0.76182723 | 0.59007734 | 4.05412038 | 13.057568 |
| 3 | -0.54719523 | 1.67787537 | 3.77488751 | 7.049988 |
| 4 | 0.10719819 | 0.00549987 | 4.16568630 | 14.590565 |

### Exercice 37 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.01448248 | -2.48787400 | 3.18524290 | 56.595143 |
| 2 | 0.89324368 | -2.46339985 | 3.24009892 | 56.546104 |
| 3 | 1.01570225 | -1.95618923 | 3.53640167 | 55.545848 |
| 4 | 0.69125289 | -2.63198679 | 3.15583255 | 56.718846 |

### Exercice 38 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.01259206 | 2.54337003 | 3.14171773 | 29.390329 |
| 2 | -0.75954278 | 1.95378519 | 3.60142781 | 27.960476 |
| 3 | -1.83929689 | 0.97782670 | 3.60905888 | 28.478193 |
| 4 | -2.45939392 | 0.72067600 | 3.28579849 | 28.682920 |

### Exercice 39 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.74833757 | -1.02234857 | 3.64178297 | 78.513156 |
| 2 | 1.44952297 | -0.53889741 | 3.86948793 | 79.709433 |
| 3 | 1.96340188 | -1.08861166 | 3.51061844 | 78.053471 |
| 4 | 2.08362630 | -1.03269528 | 3.45781809 | 77.904526 |

### Exercice 40 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.12843562 | 1.26821639 | 3.96731591 | 101.814581 |
| 2 | 0.14635882 | 1.01681463 | 4.03845654 | 102.239118 |
| 3 | 0.36182218 | 1.62044473 | 3.82200310 | 100.203298 |
| 4 | 0.87505511 | 1.55482934 | 3.76579983 | 99.901701 |

### Exercice 41 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.59256437 | 0.85215991 | 3.75526648 | 38.877940 |
| 2 | 2.36629892 | 1.01957075 | 3.27499145 | 40.944365 |
| 3 | 1.79185552 | 1.26683901 | 3.54243374 | 39.814640 |
| 4 | 3.16237799 | 0.66944475 | 2.62976677 | 41.387159 |

### Exercice 42 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 3.54834321 | 0.42375345 | 2.14339860 | 21.905287 |
| 2 | 3.25975321 | 0.15922018 | 2.59096933 | 23.046574 |
| 3 | 3.76279657 | -0.26841573 | 1.77024830 | 20.979888 |
| 4 | 3.44599949 | 0.08396185 | 2.34147432 | 22.542142 |

### Exercice 43 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.59579925 | -0.53858047 | 4.08893854 | 17.624806 |
| 2 | 0.48350539 | -1.12674061 | 3.98260496 | 17.026770 |
| 3 | -0.10654846 | -0.01130981 | 4.16569125 | 13.970130 |
| 4 | 1.30649964 | -0.12038369 | 3.95512712 | 21.127190 |

### Exercice 44 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.18182747 | -1.65552831 | 3.63689070 | 72.174223 |
| 2 | 2.99258197 | -0.97428661 | 2.73124199 | 69.917222 |
| 3 | 2.38226305 | -0.94120583 | 3.28685540 | 70.529616 |
| 4 | 2.28640178 | -1.86442294 | 2.94291659 | 70.082933 |

### Exercice 45 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.15015872 | 2.60699611 | 3.04058716 | 52.230311 |
| 2 | -1.00397913 | 2.48456485 | 3.19114831 | 51.994071 |
| 3 | -0.42476792 | 2.38059637 | 3.39364071 | 51.105280 |
| 4 | -2.19639798 | 2.24979570 | 2.73472472 | 51.613885 |

### Exercice 46 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.86761415 | -0.36556922 | 3.00126846 | 24.712898 |
| 2 | 3.30833975 | -1.05434082 | 2.30384844 | 23.035199 |
| 3 | 2.91971089 | 0.50977172 | 2.92914411 | 24.732978 |
| 4 | 3.02210141 | -0.19142401 | 2.86264284 | 24.724633 |

### Exercice 47 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 3.01063993 | -0.39821403 | 2.85340794 | 53.363061 |
| 2 | 2.84897393 | -0.30292406 | 3.02589634 | 53.571865 |
| 3 | 3.52388756 | -0.26188773 | 2.20864107 | 52.147454 |
| 4 | 2.62307062 | 0.32412687 | 3.22163101 | 53.561306 |

### Exercice 48 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.92835953 | 0.64130312 | 4.01140162 | 35.327095 |
| 2 | -0.69822702 | 0.42019093 | 4.08661017 | 36.493571 |
| 3 | -1.23959678 | 1.77043185 | 3.56278472 | 32.107036 |
| 4 | -2.13243594 | 1.39528944 | 3.29702114 | 31.011109 |

### Exercice 49 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.23764927 | 1.75795812 | 3.56963186 | 44.983622 |
| 2 | 2.60360261 | 1.79383829 | 2.71438054 | 47.316167 |
| 3 | 2.35433174 | 1.49344267 | 3.09696870 | 47.159766 |
| 4 | 1.52734681 | 2.03214843 | 3.30182504 | 45.738483 |

### Exercice 50 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.80759416 | 1.97326651 | 3.58028980 | 101.996886 |
| 2 | 0.14588950 | 1.91500202 | 3.69810054 | 102.803443 |
| 3 | -0.40876386 | 1.79628442 | 3.73774511 | 103.851299 |
| 4 | 0.48126186 | 0.87557869 | 4.04551765 | 105.453735 |

### Exercice 51 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.99984767 | 3.00107794 | 2.71261864 | 52.041259 |
| 2 | -1.85381717 | 1.97746727 | 3.16503542 | 51.225656 |
| 3 | -1.59209953 | 1.86311633 | 3.37023452 | 51.006768 |
| 4 | -1.39681972 | 2.29919771 | 3.18230241 | 51.748077 |

### Exercice 52 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.01176813 | 0.78948171 | 3.56286005 | 17.455513 |
| 2 | 2.43002123 | 1.06635409 | 3.21284140 | 18.605531 |
| 3 | 2.12962492 | 0.80656238 | 3.48978780 | 17.753937 |
| 4 | 3.00873473 | 0.48728704 | 2.84157188 | 18.642467 |

### Exercice 53 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.77365301 | -3.08529642 | 2.69200132 | 35.143010 |
| 2 | 0.89457878 | -2.66560175 | 3.07550974 | 34.936849 |
| 3 | 0.75146476 | -1.91585680 | 3.62343173 | 33.484589 |
| 4 | 0.78409922 | -3.43889049 | 2.21893775 | 34.818353 |

### Exercice 54 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.01700874 | -0.11406141 | 4.03944889 | 77.313836 |
| 2 | 1.11971636 | 0.68586567 | 3.95478035 | 77.505145 |
| 3 | 1.20265411 | -0.07398852 | 3.98906165 | 78.231887 |
| 4 | 1.24032130 | -0.37947474 | 3.96005885 | 78.478705 |

### Exercice 55 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.65518987 | 1.17689258 | 3.63864459 | 49.028434 |
| 2 | 1.76723008 | 1.29979548 | 3.54286517 | 49.615844 |
| 3 | 1.92736102 | 1.04872306 | 3.54258713 | 49.531148 |
| 4 | 0.54715192 | 1.05843545 | 3.99309445 | 44.949271 |

### Exercice 56 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.86121322 | 1.36663267 | 3.84123561 | 32.862717 |
| 2 | -0.63426643 | 0.66864727 | 4.06387512 | 31.419074 |
| 3 | 0.02933659 | -0.05934509 | 4.16654313 | 27.030578 |
| 4 | -0.78324131 | 1.04251383 | 3.95779763 | 33.444018 |

### Exercice 57 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.41609597 | -1.53887002 | 3.85009185 | 5.006969 |
| 2 | -0.51207848 | -0.71028501 | 4.07403178 | 0.960986 |
| 3 | -0.16362100 | -1.47005008 | 3.89572137 | 4.755417 |
| 4 | 0.16149696 | -1.33284804 | 3.94485728 | 4.144861 |

### Exercice 58 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 3.15948364 | 0.01763638 | 2.71694980 | 20.242880 |
| 2 | 2.59916034 | -0.53756929 | 3.21245216 | 20.550826 |
| 3 | 2.58745643 | 0.92396624 | 3.13302086 | 19.894490 |
| 4 | 3.55132215 | -0.21359255 | 2.16955140 | 19.076543 |

### Exercice 59 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.40609410 | -0.89175724 | 3.81996499 | 22.635272 |
| 2 | 2.29463228 | -0.76493295 | 3.39322919 | 21.132979 |
| 3 | 2.19441669 | -1.77996477 | 3.06279690 | 20.514813 |
| 4 | 1.82848992 | -0.95751099 | 3.61998085 | 21.700559 |

### Exercice 60 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.00063398 | 1.32664292 | 3.40616300 | 58.746749 |
| 2 | 1.53474782 | 1.64697829 | 3.50663310 | 57.995644 |
| 3 | 1.10661706 | 2.11216824 | 3.41739785 | 57.273125 |
| 4 | 1.69420836 | 1.21529024 | 3.60793455 | 57.658001 |

### Exercice 61 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.07274827 | 2.21654088 | 3.36163975 | 24.638951 |
| 2 | -1.80702919 | 1.45322568 | 3.46226006 | 23.245592 |
| 3 | -1.13904698 | 2.54500440 | 3.09677068 | 25.143772 |
| 4 | -1.73703386 | 1.59599003 | 3.43511183 | 23.616204 |

### Exercice 62 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.93460866 | -0.57781754 | 4.01958924 | 73.432560 |
| 2 | -0.26713852 | -2.03833394 | 3.62467872 | 80.456818 |
| 3 | -0.49602298 | -1.25229553 | 3.94337181 | 76.696770 |
| 4 | -0.24539451 | -0.95810317 | 4.04799752 | 75.351009 |

### Exercice 63 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.38198590 | 0.04099273 | 4.14932169 | 59.018659 |
| 2 | -0.43253903 | 0.59801474 | 4.10118915 | 61.850910 |
| 3 | -0.03658961 | 0.96289759 | 4.05412796 | 63.183274 |
| 4 | -0.13191013 | 0.91519024 | 4.06318725 | 63.067775 |

### Exercice 64 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.10311669 | 1.24141343 | 3.82184384 | 38.474169 |
| 2 | -0.82730754 | -0.04665452 | 4.08385231 | 42.403657 |
| 3 | -0.97150394 | 2.12945766 | 3.44761574 | 37.080517 |
| 4 | -0.93778179 | 1.87113144 | 3.60331743 | 37.612412 |

### Exercice 65 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.54950560 | 1.67577511 | 3.48644149 | 20.255873 |
| 2 | -1.96748688 | 2.07703583 | 3.02974943 | 21.658141 |
| 3 | -1.69104357 | 0.91910854 | 3.69595390 | 18.777348 |
| 4 | -2.49248371 | 1.16998565 | 3.12779837 | 20.642178 |

### Exercice 66 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.69703811 | -0.17973453 | 3.17145787 | 64.919291 |
| 2 | 2.68767739 | 0.54530608 | 3.13743456 | 65.500978 |
| 3 | 2.30611689 | -0.17296959 | 3.46646369 | 64.350284 |
| 4 | 2.63881975 | 0.73919192 | 3.13921801 | 65.480236 |

### Exercice 67 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.24319774 | 0.74231720 | 4.09319974 | 13.945214 |
| 2 | 0.20678397 | 0.76469146 | 4.09108194 | 13.484358 |
| 3 | -0.22668062 | 0.94845903 | 4.05135847 | 14.948062 |
| 4 | -0.25741819 | 0.88947278 | 4.06288544 | 14.692847 |

### Exercice 68 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.12591391 | 0.90521363 | 3.46778639 | 14.541494 |
| 2 | 1.61824472 | 1.60713291 | 3.48753092 | 14.569253 |
| 3 | 1.54305877 | 0.87343326 | 3.77101419 | 12.810829 |
| 4 | 1.27949371 | 0.90280156 | 3.86164593 | 12.031896 |

### Exercice 69 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.75806939 | 2.32403137 | 2.97867996 | 70.153743 |
| 2 | 2.77876899 | 2.48061831 | 1.86800424 | 67.489188 |
| 3 | 2.94495986 | 1.66242397 | 2.43475298 | 69.179760 |
| 4 | 2.35038662 | 2.87106890 | 1.89660491 | 67.277449 |

### Exercice 70 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.88829381 | 0.43728782 | 2.97170024 | 2.049328 |
| 2 | 2.69726695 | 1.56968756 | 2.76139386 | 1.402261 |
| 3 | 2.59513179 | 1.17919393 | 3.03961457 | 1.726372 |
| 4 | 3.35214106 | 0.73840857 | 2.36270337 | 1.908450 |

### Exercice 71 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -2.63110587 | 0.96438960 | 3.08410419 | 73.784736 |
| 2 | -0.89748282 | 2.24432565 | 3.39440585 | 73.078945 |
| 3 | -1.32016515 | 0.86220063 | 3.85723193 | 71.318836 |
| 4 | -2.04572881 | 1.85144401 | 3.12275724 | 75.003775 |

### Exercice 72 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.73323470 | 2.09968432 | 2.34205421 | 27.941938 |
| 2 | 2.12701303 | 1.41409717 | 3.29250799 | 29.794779 |
| 3 | 3.53066611 | 1.68877035 | 1.43070460 | 24.506918 |
| 4 | 2.88959939 | 2.29710002 | 1.93339364 | 26.646023 |

### Exercice 73 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.51880991 | 1.23958358 | 3.67710662 | 102.763563 |
| 2 | -1.83132491 | 0.93367295 | 3.62477144 | 102.778667 |
| 3 | -0.61573505 | 0.44413212 | 4.09732609 | 106.872614 |
| 4 | -1.62811448 | 0.42699621 | 3.81200493 | 104.426204 |

### Exercice 74 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.55434878 | 2.37970100 | 3.04720972 | 38.705636 |
| 2 | -1.54040547 | 1.30754085 | 3.64444124 | 36.388209 |
| 3 | -1.01070195 | 1.87865398 | 3.57960960 | 37.508812 |
| 4 | -1.23277276 | 2.31643413 | 3.23710803 | 38.518286 |

### Exercice 75 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.08857914 | -0.90571054 | 3.49027072 | 69.049230 |
| 2 | 2.23039604 | -0.21755357 | 3.51318488 | 69.650929 |
| 3 | 3.23897037 | -0.01820603 | 2.62167953 | 71.331143 |
| 4 | 2.85658954 | -0.16707669 | 3.02926488 | 70.993962 |

### Exercice 76 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.26188802 | 0.23016070 | 3.96473565 | 22.414627 |
| 2 | 1.94509418 | 0.93001877 | 3.56596941 | 25.363522 |
| 3 | 1.71621787 | -0.69254947 | 3.73355535 | 24.832472 |
| 4 | 0.76877349 | -0.62619227 | 4.04738615 | 20.120371 |

### Exercice 77 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.39453384 | -0.99071916 | 3.79976513 | 23.257691 |
| 2 | 1.25305494 | -0.46457414 | 3.94695937 | 22.568186 |
| 3 | 1.78371788 | -0.53389259 | 3.72797174 | 25.190699 |
| 4 | 1.95075482 | -0.18854326 | 3.67742725 | 25.956264 |

### Exercice 78 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 3.59748271 | 0.79086977 | 1.94861674 | 28.882634 |
| 2 | 3.28611046 | -0.06709249 | 2.56153094 | 30.844901 |
| 3 | 3.86159047 | 0.32546430 | 1.53187994 | 27.921083 |
| 4 | 2.64646388 | 0.81820131 | 3.11307559 | 30.919623 |

### Exercice 79 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.37711162 | -1.80342934 | 3.73763207 | 76.229729 |
| 2 | 0.14415099 | -2.54991440 | 3.29266171 | 79.654518 |
| 3 | 0.00990152 | -1.72744149 | 3.79213818 | 75.971423 |
| 4 | 0.20010799 | -1.13870923 | 4.00346877 | 73.180607 |

### Exercice 80 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.60898349 | -1.76343397 | 3.41554342 | 103.596705 |
| 2 | 1.76521653 | -1.04584930 | 3.62693726 | 103.828708 |
| 3 | 2.03005122 | -1.32893227 | 3.38781569 | 103.107796 |
| 4 | 2.28927537 | -1.91839691 | 2.90575906 | 102.461552 |

### Exercice 81 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.25975568 | 3.01264144 | 1.78380490 | 13.478275 |
| 2 | 2.86101627 | 1.21648443 | 2.77474605 | 16.514298 |
| 3 | 2.74716034 | 2.10867106 | 2.31755917 | 15.712422 |
| 4 | 2.63465601 | 2.28564715 | 2.28010282 | 15.579971 |

### Exercice 82 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -2.07219186 | 2.55605707 | 2.55676696 | 15.759181 |
| 2 | -1.36623046 | 2.39093027 | 3.12751193 | 15.893063 |
| 3 | -1.48062589 | 2.41659398 | 3.05487882 | 15.952280 |
| 4 | -0.95840649 | 2.76717414 | 2.96456883 | 15.998217 |

### Exercice 83 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.16740477 | -0.46754432 | 4.13737139 | 20.707893 |
| 2 | 0.52753988 | -1.78902927 | 3.72633064 | 27.087201 |
| 3 | 0.02073497 | -1.48534411 | 3.89330027 | 25.667172 |
| 4 | -0.60780288 | -2.31528323 | 3.41093877 | 29.262523 |

### Exercice 84 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 3.10045271 | -0.45480619 | 2.74678147 | 71.855412 |
| 2 | 2.78050679 | -0.15866660 | 3.09968885 | 71.481157 |
| 3 | 2.30667742 | 0.78294685 | 3.38093147 | 69.808620 |
| 4 | 2.12159999 | 0.85188834 | 3.48390066 | 69.235634 |

### Exercice 85 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 3.52137119 | 1.00466728 | 1.98873143 | 38.336582 |
| 2 | 3.32014479 | -0.41856700 | 2.48312391 | 40.215262 |
| 3 | 3.18858381 | -0.09950457 | 2.68095062 | 40.649293 |
| 4 | 3.57077240 | 0.16520053 | 2.14167162 | 39.420723 |

### Exercice 86 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.50506020 | 2.33930353 | 3.10272733 | 15.899005 |
| 2 | -1.59917193 | 1.43888421 | 3.56885492 | 14.643042 |
| 3 | -1.01221881 | 1.02620160 | 3.90983215 | 12.188944 |
| 4 | -1.73812244 | 0.91920815 | 3.67402380 | 13.644492 |

### Exercice 87 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.59122786 | -0.71971254 | 3.18308280 | 64.268634 |
| 2 | 2.78187691 | -0.31251949 | 3.08673881 | 64.511454 |
| 3 | 3.01228443 | 0.22513214 | 2.87052645 | 64.278193 |
| 4 | 3.32041064 | -0.00776814 | 2.51779207 | 63.764639 |

### Exercice 88 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.85276790 | 0.25986555 | 3.02632604 | 48.886225 |
| 2 | 2.74783418 | 1.28161715 | 2.85855364 | 48.727310 |
| 3 | 2.22208703 | 0.93310196 | 3.39942849 | 48.214229 |
| 4 | 2.60597987 | 0.43019037 | 3.22308381 | 48.748671 |

### Exercice 89 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.57382882 | 1.65001283 | 3.48783379 | 57.928369 |
| 2 | -0.75324950 | 1.57417663 | 3.78405169 | 55.647785 |
| 3 | -1.14039420 | 1.79254685 | 3.58479301 | 57.166109 |
| 4 | -2.76804249 | 1.31049102 | 2.82577744 | 58.765567 |

### Exercice 90 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.46917349 | -1.60785103 | 3.81564613 | 12.412907 |
| 2 | -0.88647979 | -2.02016350 | 3.53518841 | 14.084977 |
| 3 | 0.03686410 | -1.47332600 | 3.89774494 | 11.906862 |
| 4 | 0.41148405 | -1.37585457 | 3.91179871 | 11.448677 |

### Exercice 91 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.51846529 | 0.80717681 | 3.79568081 | 62.740219 |
| 2 | 2.21297418 | 0.52904025 | 3.49103506 | 64.203011 |
| 3 | 2.70035969 | 1.35778215 | 2.86861452 | 65.738345 |
| 4 | 2.73324315 | 0.86835800 | 3.02321027 | 65.494844 |

### Exercice 92 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.90579810 | 1.16394230 | 3.51818646 | 43.860399 |
| 2 | 2.83707449 | 1.10057217 | 2.84679000 | 45.443779 |
| 3 | 2.69423213 | 1.27388286 | 2.91252464 | 45.392360 |
| 4 | 2.30922219 | 1.06735525 | 3.30041054 | 44.694348 |

### Exercice 93 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.67749530 | -2.54414914 | 3.22997978 | 33.239057 |
| 2 | 0.45505804 | -2.46483619 | 3.32895912 | 32.974886 |
| 3 | 1.75962643 | -1.81710132 | 3.31154371 | 31.581925 |
| 4 | 1.25069689 | -1.54171029 | 3.66378913 | 31.080730 |

### Exercice 94 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.94455944 | 1.07308817 | 3.52585230 | 39.788384 |
| 2 | 1.56816735 | 1.62675540 | 3.50128293 | 39.510596 |
| 3 | 1.38791853 | 0.79709173 | 3.84743954 | 37.418147 |
| 4 | 2.29016100 | 1.06424960 | 3.31466431 | 40.736347 |

### Exercice 95 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.42484063 | 1.97033643 | 3.64715627 | 98.430814 |
| 2 | -0.02059822 | 2.35311879 | 3.43902192 | 98.028609 |
| 3 | -0.35410721 | 2.11622134 | 3.57220932 | 99.031323 |
| 4 | 0.98637930 | 1.71751583 | 3.66628686 | 98.591595 |

### Exercice 96 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.21447441 | -1.02711211 | 4.03280368 | 46.963450 |
| 2 | -0.05906997 | -1.43908108 | 3.91024558 | 48.983138 |
| 3 | -0.23538620 | -1.86356804 | 3.71970047 | 50.935689 |
| 4 | 0.83099673 | -2.30787212 | 3.36862506 | 52.883869 |

### Exercice 97 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.81055156 | 0.26809664 | 4.07867558 | 53.931551 |
| 2 | -0.47721486 | 1.20174511 | 3.96138091 | 50.554076 |
| 3 | -0.21148622 | 0.71842025 | 4.09922066 | 52.791625 |
| 4 | -0.34012880 | 1.33308683 | 3.93340260 | 50.216826 |

### Exercice 98 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.56858487 | -1.03825266 | 3.11269453 | 22.247225 |
| 2 | 3.04704743 | 0.40413139 | 2.81365311 | 22.500089 |
| 3 | 2.86205971 | -0.33284505 | 3.01036418 | 22.848266 |
| 4 | 3.21943668 | -1.03921116 | 2.43304987 | 21.443438 |

### Exercice 99 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.66166599 | 1.73871878 | 3.72874231 | 62.578763 |
| 2 | -0.05042329 | 0.92905238 | 4.06186943 | 65.762454 |
| 3 | 1.54511921 | 2.08338885 | 3.26137419 | 61.156451 |
| 4 | 1.34969698 | 1.49952902 | 3.64612053 | 62.729997 |

### Exercice 100 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 3.11883025 | -0.13442910 | 2.76030629 | 63.529235 |
| 2 | 2.71234451 | -0.12615780 | 3.16097066 | 63.710898 |
| 3 | 3.15245815 | 0.64066829 | 2.64877629 | 63.780058 |
| 4 | 2.91009087 | 0.27871120 | 2.96953789 | 63.984167 |

### Exercice 101 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.60888434 | 1.58402771 | 3.80586129 | 90.214519 |
| 2 | 0.00836899 | 1.30898934 | 3.95612701 | 91.996651 |
| 3 | 0.08831103 | -0.10500289 | 4.16480968 | 97.944098 |
| 4 | -0.47361282 | 0.92795415 | 4.03473123 | 92.874768 |

### Exercice 102 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.84078203 | 2.02508408 | 2.27891554 | 34.200884 |
| 2 | 2.89086420 | 2.10136028 | 2.14281433 | 33.785482 |
| 3 | 2.80058476 | 2.10647282 | 2.25476414 | 34.136276 |
| 4 | 2.41066201 | 2.12586099 | 2.65214778 | 35.193961 |

### Exercice 103 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 3.14729729 | 1.20130842 | 2.45272134 | 25.263309 |
| 2 | 2.88643958 | -0.48951069 | 2.96535157 | 24.468575 |
| 3 | 2.74503721 | 0.57253056 | 3.08244117 | 25.443098 |
| 4 | 2.40385263 | 1.33445035 | 3.13132542 | 24.824934 |

### Exercice 104 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.39782764 | 1.74629921 | 3.76253057 | 38.483709 |
| 2 | 0.23427159 | 1.80445491 | 3.74880293 | 38.507843 |
| 3 | 0.48760154 | 1.83063791 | 3.71153253 | 38.168812 |
| 4 | 1.38784990 | 2.26065480 | 3.21368583 | 36.484988 |

### Exercice 105 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.94177289 | -0.86850756 | 3.96525189 | 65.615497 |
| 2 | 2.01271559 | -1.14051038 | 3.46593077 | 63.043067 |
| 3 | 1.67311796 | -0.32241176 | 3.80278727 | 64.666260 |
| 4 | 1.64739550 | -1.27501257 | 3.60900195 | 63.596151 |

### Exercice 106 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.41025914 | 0.29774104 | 3.38621695 | 5.635708 |
| 2 | 1.72517344 | 0.60847726 | 3.74406145 | 4.493233 |
| 3 | 2.75559589 | 1.32163078 | 2.83274557 | 7.183825 |
| 4 | 2.38282533 | 1.04931198 | 3.25354451 | 6.539656 |

### Exercice 107 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.46266273 | -1.34290921 | 3.91752500 | 52.158063 |
| 2 | 0.09127015 | -1.82500857 | 3.74506042 | 54.563407 |
| 3 | -0.18573804 | -1.44578693 | 3.90380143 | 52.735200 |
| 4 | -0.02132359 | -1.89439518 | 3.71150593 | 54.869836 |

### Exercice 108 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.63003591 | -0.19403379 | 3.22641071 | 17.667438 |
| 2 | 1.87117167 | 0.62148347 | 3.67109506 | 17.567482 |
| 3 | 2.00472315 | 1.23495821 | 3.43808484 | 18.531921 |
| 4 | 2.78804105 | 1.22886870 | 2.84274039 | 19.841131 |

### Exercice 109 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.19981589 | -0.05984054 | 3.99015351 | 69.094605 |
| 2 | 2.16774342 | -0.73616797 | 3.48186865 | 73.902519 |
| 3 | 1.30617230 | 0.37198877 | 3.93954342 | 69.470911 |
| 4 | 2.14223173 | -0.49335654 | 3.54004331 | 73.781819 |

### Exercice 110 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.44994712 | 1.59418207 | 3.56660917 | 61.165231 |
| 2 | 0.69804651 | 1.62445514 | 3.77337258 | 61.054955 |
| 3 | 0.89094419 | 2.69803254 | 3.04816387 | 65.118161 |
| 4 | -0.10814984 | 2.18416470 | 3.54713860 | 62.524455 |

### Exercice 111 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.57492205 | 1.98922170 | 3.30561366 | 49.404569 |
| 2 | 1.22348403 | 1.38944686 | 3.73322761 | 46.968514 |
| 3 | 0.75730962 | 1.68040668 | 3.73726901 | 48.011071 |
| 4 | -0.35286468 | 2.33396026 | 3.43403263 | 49.425761 |

### Exercice 112 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.33641713 | 1.97451471 | 3.65411812 | 13.377393 |
| 2 | 0.26939739 | 1.53394648 | 3.86508697 | 11.519896 |
| 3 | 0.45953589 | 1.80935222 | 3.72552485 | 12.823835 |
| 4 | 0.72815990 | 2.85099451 | 2.95060630 | 16.681034 |

### Exercice 113 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.15906186 | 0.98368921 | 3.87987052 | 5.020796 |
| 2 | -1.17781215 | 1.12386013 | 3.83590420 | 4.658807 |
| 3 | -1.22632015 | 1.14730779 | 3.81369739 | 4.492174 |
| 4 | -1.14572580 | 1.14752535 | 3.83861460 | 4.682769 |

### Exercice 114 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.64120934 | -0.35407021 | 4.10218831 | 65.963485 |
| 2 | 0.58662680 | -2.20200432 | 3.48876913 | 74.800880 |
| 3 | 0.39724033 | -2.30021303 | 3.45191023 | 75.264089 |
| 4 | 0.10345375 | -2.17191452 | 3.55479236 | 74.700951 |

### Exercice 115 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -2.19326927 | 2.33655725 | 2.66355668 | 55.939396 |
| 2 | -0.79356913 | 2.85068350 | 2.93399313 | 56.330504 |
| 3 | -1.60354237 | 2.61325978 | 2.82205408 | 56.571873 |
| 4 | -1.86952795 | 2.06867128 | 3.09676096 | 55.863468 |

### Exercice 116 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.41496658 | 0.41801967 | 3.37011276 | 17.875973 |
| 2 | 2.94609957 | 0.80841845 | 2.83397618 | 18.814091 |
| 3 | 2.84570850 | 2.09363848 | 2.20977038 | 18.774307 |
| 4 | 2.39662898 | 1.44929345 | 3.08547923 | 19.058912 |

### Exercice 117 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.13923642 | -1.19392798 | 3.98993901 | 6.177365 |
| 2 | -0.37159012 | -0.79170234 | 4.07425972 | 4.152736 |
| 3 | 0.76772295 | -1.31229638 | 3.87981234 | 6.721440 |
| 4 | -0.33727977 | -0.58946456 | 4.11135476 | 3.163268 |

### Exercice 118 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.86489995 | 0.49340483 | 4.04635192 | 34.008070 |
| 2 | -0.52478158 | 1.18301535 | 3.96100279 | 33.247325 |
| 3 | -0.97576581 | 0.87373441 | 3.95587327 | 32.785988 |
| 4 | -1.18753253 | 1.11603892 | 3.83519070 | 31.712025 |

### Exercice 119 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 3.30795850 | -0.30506515 | 2.51571260 | 49.793436 |
| 2 | 3.08326931 | 0.05918467 | 2.80257232 | 50.313399 |
| 3 | 2.85919112 | -0.01923655 | 3.03135616 | 50.467100 |
| 4 | 2.81745157 | -0.94814572 | 2.92017987 | 49.562432 |

### Exercice 120 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -2.36376574 | 0.59931937 | 3.37903713 | 20.745141 |
| 2 | -1.94127304 | 1.14845868 | 3.50385013 | 21.629830 |
| 3 | -1.29094744 | 2.73917068 | 2.86266708 | 22.670288 |
| 4 | -1.04189824 | 1.16902074 | 3.86164507 | 19.639704 |

### Exercice 121 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.44198950 | -0.05718480 | 3.90920200 | 69.271824 |
| 2 | 2.04501347 | -0.95342947 | 3.50333501 | 66.862304 |
| 3 | 1.78821895 | -1.11645308 | 3.59447765 | 67.158627 |
| 4 | 2.49094023 | -0.37016468 | 3.32003901 | 66.907361 |

### Exercice 122 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.88556007 | 2.08341836 | 3.07709202 | 0.243330 |
| 2 | 2.51975873 | 0.55156868 | 3.27277436 | 0.157185 |
| 3 | 2.78341523 | 1.69227711 | 2.59870390 | 1.148903 |
| 4 | 2.46456639 | 1.29059138 | 3.10237820 | 0.968907 |

### Exercice 123 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.38023178 | 1.15431096 | 3.98590693 | 76.673692 |
| 2 | 0.25714722 | 1.62135639 | 3.83008392 | 78.573336 |
| 3 | -0.36753094 | 1.95301509 | 3.66266531 | 79.173095 |
| 4 | 0.90560974 | 0.79477894 | 3.98906775 | 75.396771 |

### Exercice 124 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.04886080 | -1.47307155 | 3.89770919 | 66.451420 |
| 2 | 0.79476739 | -0.47990268 | 4.06232720 | 61.545538 |
| 3 | -0.70366266 | -1.53134873 | 3.81107518 | 66.488931 |
| 4 | -0.02022425 | -1.52240993 | 3.87895902 | 66.676702 |

### Exercice 125 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.39289027 | 1.68781976 | 2.96476048 | 5.001978 |
| 2 | 2.92154099 | 0.78044981 | 2.86704733 | 4.688519 |
| 3 | 1.97147632 | 1.82055999 | 3.18799412 | 4.446897 |
| 4 | 2.30685962 | 1.58674036 | 3.08627896 | 4.908161 |

### Exercice 126 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.10177900 | -0.50878253 | 4.13463970 | 10.148187 |
| 2 | 0.91046312 | -1.39710621 | 3.81884999 | 14.385123 |
| 3 | -1.20024566 | -1.28253466 | 3.77875367 | 13.385161 |
| 4 | 0.13963847 | -1.34091604 | 3.94295693 | 14.227615 |

### Exercice 127 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.06632889 | 0.89187088 | 3.92835501 | 99.206055 |
| 2 | -0.66592707 | 1.44953258 | 3.84965720 | 98.979598 |
| 3 | -0.64488536 | 1.21458823 | 3.93361950 | 99.542560 |
| 4 | -0.49739988 | 0.99885060 | 4.01489165 | 100.432539 |

### Exercice 128 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.43065795 | -1.21617561 | 3.96231179 | 4.625265 |
| 2 | -1.12653273 | -1.58597065 | 3.68511671 | 5.988295 |
| 3 | -0.79965455 | -1.95840299 | 3.59021927 | 7.926831 |
| 4 | -0.73076436 | -1.04349183 | 3.96756504 | 3.659403 |

### Exercice 129 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.71437838 | 0.07933020 | 3.79724605 | 59.871468 |
| 2 | 2.45347177 | 1.13673917 | 3.17060948 | 63.017871 |
| 3 | 2.98562957 | 0.13453174 | 2.90385630 | 62.368399 |
| 4 | 2.75063661 | 1.60516370 | 2.68736150 | 63.457090 |

### Exercice 130 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.56352294 | -2.47296382 | 3.30626011 | 78.545064 |
| 2 | -0.09831081 | -1.44838970 | 3.90601669 | 74.056366 |
| 3 | -0.84271295 | -2.15236568 | 3.46722093 | 76.991630 |
| 4 | 0.13654079 | -1.47123900 | 3.89631576 | 74.195289 |

### Exercice 131 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.27397277 | 2.04020860 | 2.83391264 | 27.797955 |
| 2 | 1.91592496 | 0.97202344 | 3.57055543 | 25.354395 |
| 3 | 2.01922133 | 1.36987470 | 3.37796575 | 26.374860 |
| 4 | 2.09902892 | 1.57523982 | 3.23684433 | 26.899635 |

### Exercice 132 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.08187817 | 1.16309490 | 3.85242962 | 68.465119 |
| 2 | -1.81860560 | 1.72914917 | 3.32673728 | 65.710807 |
| 3 | -1.16740020 | 1.06606922 | 3.85553333 | 68.476194 |
| 4 | -0.24244535 | 1.83670248 | 3.73258735 | 69.268701 |

### Exercice 133 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 3.37250897 | -0.14944454 | 2.44301324 | 52.945282 |
| 2 | 2.79777782 | 0.55751222 | 3.03744687 | 53.535420 |
| 3 | 3.15167098 | 1.34626039 | 2.37044660 | 51.887913 |
| 4 | 3.36034976 | 0.59444230 | 2.39147484 | 52.764812 |

### Exercice 134 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 3.04267780 | 0.95329995 | 2.68287068 | 40.419557 |
| 2 | 3.26346719 | -0.09777069 | 2.58934101 | 40.992169 |
| 3 | 2.99849778 | -0.68019976 | 2.81261506 | 41.122422 |
| 4 | 3.24582070 | 0.15100524 | 2.60889047 | 40.986874 |

### Exercice 135 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 3.52431042 | -0.51966310 | 2.16186273 | 46.119961 |
| 2 | 3.74130538 | 0.49662389 | 1.76648319 | 45.282597 |
| 3 | 2.67577948 | -1.03684584 | 3.02152593 | 46.620365 |
| 4 | 2.77979572 | -0.65817157 | 3.03381114 | 47.202216 |

### Exercice 136 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.55638342 | 0.65165929 | 3.22563297 | 51.674934 |
| 2 | 3.20818196 | -0.29958948 | 2.64240019 | 51.494987 |
| 3 | 2.79714837 | -0.23453488 | 3.07984065 | 52.042862 |
| 4 | 3.28430032 | -0.25430759 | 2.55208996 | 51.338250 |

### Exercice 137 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.36045892 | 2.24087554 | 2.60214808 | 54.299384 |
| 2 | 3.06306801 | 1.64187335 | 2.29920211 | 53.363353 |
| 3 | 2.43290092 | 1.92692060 | 2.78072548 | 54.776036 |
| 4 | 2.96431498 | 1.82345637 | 2.29179136 | 53.442910 |

### Exercice 138 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.27070479 | 1.67291237 | 3.80690783 | 28.411428 |
| 2 | 0.87866576 | 1.59327183 | 3.74885255 | 28.044714 |
| 3 | 0.93649222 | 1.77373081 | 3.65257791 | 27.515116 |
| 4 | 0.47801264 | 1.98846112 | 3.63070108 | 27.366506 |

### Exercice 139 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.15287952 | -1.25326558 | 3.34049386 | 79.867495 |
| 2 | 1.96101724 | -1.24222173 | 3.46060119 | 80.188466 |
| 3 | 0.91189821 | -1.16612331 | 3.89526150 | 82.512795 |
| 4 | 1.33263070 | -0.83320650 | 3.85931683 | 81.863022 |

### Exercice 140 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.78291407 | -3.01881757 | 2.76373844 | 30.930837 |
| 2 | 0.73140992 | -3.38996591 | 2.31033218 | 30.691124 |
| 3 | -0.29117309 | -3.19702965 | 2.65681834 | 29.840359 |
| 4 | 0.59623478 | -2.27620556 | 3.43916507 | 29.997206 |

### Exercice 141 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.46327756 | 1.76553187 | 2.86000436 | 66.657563 |
| 2 | 1.83440016 | 1.76651088 | 3.29831464 | 65.207741 |
| 3 | 2.56403145 | 1.16423682 | 3.07160535 | 65.842909 |
| 4 | 1.75901793 | 1.32662160 | 3.53700369 | 64.220989 |

### Exercice 142 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.76758905 | 2.21182913 | 2.19379280 | 28.826829 |
| 2 | 3.03057958 | 2.45729416 | 1.46347425 | 26.264467 |
| 3 | 2.93413198 | 1.59895717 | 2.48971275 | 29.533332 |
| 4 | 3.05492629 | 1.91637005 | 2.08792128 | 28.432649 |

### Exercice 143 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.23109879 | 0.92133131 | 4.05736442 | 41.575762 |
| 2 | -0.04355045 | 0.58862106 | 4.12505669 | 39.694715 |
| 3 | -0.80323675 | 1.24728660 | 3.89404044 | 43.848578 |
| 4 | 0.12357834 | 0.95031796 | 4.05537770 | 41.267387 |

### Exercice 144 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.24143580 | -0.69583721 | 3.44328916 | 39.912205 |
| 2 | 2.00334657 | -1.28755286 | 3.41954299 | 38.781764 |
| 3 | 2.61460267 | -0.27711773 | 3.23288149 | 40.892339 |
| 4 | 2.75220797 | -1.24223534 | 2.87170102 | 40.491061 |

### Exercice 145 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 3.02553347 | 0.44765536 | 2.83023249 | 58.956960 |
| 2 | 2.80928298 | -0.68870505 | 2.99967974 | 57.883032 |
| 3 | 3.37675267 | 0.81516856 | 2.30163109 | 58.216642 |
| 4 | 2.97229882 | 0.40504213 | 2.89237700 | 58.991861 |

### Exercice 146 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.42691568 | -1.93251723 | 2.78207145 | 5.905283 |
| 2 | 2.54170960 | -1.25482266 | 3.05443882 | 6.052812 |
| 3 | 2.49347451 | -1.71949068 | 2.86188762 | 5.873382 |
| 4 | 2.04099110 | -1.11928690 | 3.45630095 | 6.861072 |

### Exercice 147 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.20696946 | 1.50310913 | 3.69436757 | 33.551126 |
| 2 | 0.78756458 | 1.52448429 | 3.79738776 | 32.104305 |
| 3 | 2.18272238 | 1.20638966 | 3.33838450 | 35.839760 |
| 4 | 2.45845665 | 1.37589634 | 3.07040132 | 36.778340 |

### Exercice 148 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.23813964 | -0.20188583 | 3.50919323 | 9.694654 |
| 2 | 2.65780542 | 0.85335415 | 3.09391680 | 11.005471 |
| 3 | 3.10296014 | 0.62666197 | 2.70987034 | 11.210701 |
| 4 | 2.09879286 | 0.73317574 | 3.52448378 | 10.086646 |

### Exercice 149 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.49843851 | -0.48209184 | 3.29997826 | 52.118418 |
| 2 | 2.68082947 | -0.69597930 | 3.11339529 | 52.403195 |
| 3 | 2.54560810 | -0.17728449 | 3.29437607 | 52.243501 |
| 4 | 3.17048331 | 0.47224028 | 2.66260939 | 52.793583 |

### Exercice 150 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.77880986 | 1.10454124 | 3.60281671 | 5.080886 |
| 2 | 1.62432652 | 0.95453114 | 3.71683975 | 4.289977 |
| 3 | 1.45168913 | 1.46796090 | 3.61968970 | 4.627476 |
| 4 | 2.50489524 | 0.93238834 | 3.19696980 | 6.748189 |

### Exercice 151 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.49378140 | 1.94245973 | 3.65342226 | 51.314635 |
| 2 | 0.44216716 | 1.72388969 | 3.76791144 | 50.393978 |
| 3 | 0.18669894 | 2.13299055 | 3.57490684 | 51.777106 |
| 4 | 0.92620506 | 1.06061698 | 3.92195103 | 47.846936 |

### Exercice 152 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.24156147 | -2.01615360 | 3.63885103 | 31.200494 |
| 2 | 1.70413694 | -2.32314009 | 3.01054837 | 32.639147 |
| 3 | 0.18872693 | -2.18494898 | 3.54328156 | 32.182195 |
| 4 | 1.64931377 | -2.00556302 | 3.25913257 | 32.106067 |

### Exercice 153 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.75162922 | -1.35739803 | 3.86742656 | 75.438643 |
| 2 | 0.55684263 | -0.49530669 | 4.09988557 | 71.261743 |
| 3 | 0.82593083 | -2.16509557 | 3.46333128 | 79.145372 |
| 4 | 1.24289661 | -0.96403995 | 3.85879503 | 73.350684 |

### Exercice 154 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.19135389 | 1.94950259 | 2.96004592 | 32.978924 |
| 2 | 1.83217548 | 1.44717541 | 3.45156203 | 32.214098 |
| 3 | 2.68751836 | -0.10034493 | 3.18302373 | 31.960540 |
| 4 | 2.58437033 | 1.28165571 | 3.00713364 | 33.649537 |

### Exercice 155 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.59010544 | 0.11202754 | 3.26240214 | 11.967305 |
| 2 | 3.13736467 | -0.01471629 | 2.74247888 | 12.168580 |
| 3 | 2.68949362 | 1.08833782 | 2.99108825 | 12.289651 |
| 4 | 2.66825078 | 0.68681581 | 3.12620951 | 12.357439 |

### Exercice 156 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.80351057 | 0.66405008 | 3.69741142 | 40.891835 |
| 2 | 1.66575395 | 1.42832617 | 3.54254318 | 41.924905 |
| 3 | 1.81888219 | 1.78291789 | 3.29808058 | 42.891703 |
| 4 | 0.85458694 | 0.92084019 | 3.97318494 | 38.105505 |

### Exercice 157 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.39221710 | 1.25783982 | 3.72075726 | 16.520858 |
| 2 | 0.46433073 | 2.25630769 | 3.47245398 | 14.604715 |
| 3 | 1.86366250 | 1.56326986 | 3.38340265 | 15.490684 |
| 4 | -0.22867956 | 1.55399427 | 3.85969838 | 17.234446 |

### Exercice 158 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.25314414 | 1.30252213 | 3.25441879 | 44.549548 |
| 2 | 1.86197858 | 1.09754116 | 3.56271010 | 43.681851 |
| 3 | 2.76694516 | 2.19119623 | 2.21520602 | 44.430766 |
| 4 | 2.83143925 | 0.24851915 | 3.04723713 | 43.624654 |

### Exercice 159 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.45746986 | 0.23502913 | 3.89679445 | 34.928263 |
| 2 | -0.85601650 | 0.52451236 | 4.04432771 | 35.646513 |
| 3 | -1.11362406 | 0.00817443 | 4.01549981 | 36.371042 |
| 4 | -0.83532976 | 1.16206145 | 3.91360466 | 34.172085 |

### Exercice 160 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.12033389 | 0.96109778 | 4.05293411 | 11.732362 |
| 2 | -0.50548873 | 1.18721994 | 3.96225366 | 13.317689 |
| 3 | -0.48784661 | -0.27474358 | 4.12928393 | 6.011306 |
| 4 | -0.73593244 | 1.10278000 | 3.95053715 | 13.153845 |

### Exercice 161 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.98233490 | 1.64485185 | 2.40095920 | 28.969390 |
| 2 | 2.35674123 | 1.29821880 | 3.18195895 | 28.787071 |
| 3 | 2.17575776 | 1.38817037 | 3.27162426 | 28.601816 |
| 4 | 2.48066717 | 0.64797283 | 3.28494835 | 28.198962 |

### Exercice 162 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.22237485 | -1.66905837 | 3.81172634 | 24.827904 |
| 2 | 0.09445468 | -2.08231981 | 3.60825257 | 26.786603 |
| 3 | 0.25488900 | -1.41478589 | 3.91125000 | 23.686911 |
| 4 | 1.05598946 | -1.19170320 | 3.85086923 | 22.447724 |

### Exercice 163 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.07684640 | 1.02923978 | 4.03722977 | 62.015098 |
| 2 | 0.71534268 | 1.64577823 | 3.76087263 | 65.383428 |
| 3 | 0.21256036 | 1.92578774 | 3.68925789 | 66.119926 |
| 4 | 0.69077966 | 1.48339318 | 3.83234031 | 64.685573 |

### Exercice 164 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.93528712 | -1.72371985 | 3.67675019 | 22.946959 |
| 2 | -0.04217749 | -1.44570245 | 3.90802119 | 21.745923 |
| 3 | 0.42057501 | -2.41465419 | 3.37001868 | 26.180818 |
| 4 | 0.95796600 | -2.08815625 | 3.47654551 | 24.593746 |

### Exercice 165 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.11909336 | -2.19702720 | 3.35934006 | 56.369264 |
| 2 | 0.37096697 | -3.11218524 | 2.74611555 | 57.111662 |
| 3 | 0.83102271 | -2.52113967 | 3.21212081 | 56.903085 |
| 4 | 0.75130992 | -2.10273328 | 3.51831071 | 56.093160 |

### Exercice 166 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.70830444 | 0.58735746 | 3.11200295 | 12.456865 |
| 2 | 2.71727307 | 0.47436007 | 3.12343940 | 12.429793 |
| 3 | 2.71897276 | 0.44532648 | 3.12623344 | 12.419250 |
| 4 | 2.78118053 | 0.37938667 | 3.07986440 | 12.443584 |

### Exercice 167 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.57894249 | 1.52994912 | 2.89357485 | 78.393402 |
| 2 | 0.82898721 | 1.60659233 | 3.75447804 | 73.072964 |
| 3 | 1.91008715 | 0.91259797 | 3.58931694 | 75.630542 |
| 4 | 1.71878760 | 1.25785608 | 3.58162412 | 75.687631 |

### Exercice 168 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.55314149 | -0.14450445 | 3.29014454 | 53.778329 |
| 2 | 2.50209090 | -0.18909791 | 3.32689753 | 53.671342 |
| 3 | 2.53070327 | -0.19431838 | 3.30488205 | 53.735611 |
| 4 | 3.06957991 | -0.68584390 | 2.73345229 | 54.453017 |

### Exercice 169 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.33858308 | 1.31070202 | 3.19022781 | 45.478981 |
| 2 | 3.22751203 | 1.48432672 | 2.17816538 | 45.386797 |
| 3 | 2.42293153 | 1.21320248 | 3.16575530 | 45.505557 |
| 4 | 2.76648768 | 1.02222659 | 2.94381773 | 45.581414 |

### Exercice 170 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.71679422 | -2.65150128 | 3.13372160 | 14.083101 |
| 2 | 0.79116730 | -3.36561990 | 2.32618166 | 14.147675 |
| 3 | 0.71886677 | -2.62276950 | 3.15733666 | 14.048865 |
| 4 | 0.55692706 | -2.00663265 | 3.60939354 | 12.801764 |

### Exercice 171 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.61096459 | 2.38054451 | 3.01699602 | 47.637453 |
| 2 | -1.08938515 | 2.10059003 | 3.43004746 | 46.978769 |
| 3 | -2.06283627 | 2.74904739 | 2.35624894 | 47.476752 |
| 4 | -0.97168059 | 2.52482907 | 3.16946984 | 47.527429 |

### Exercice 172 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.59366837 | 1.61691063 | 3.49432186 | 56.319915 |
| 2 | -1.35974375 | 1.11326797 | 3.77838530 | 54.630404 |
| 3 | -2.02686089 | 0.84094016 | 3.54247352 | 55.275396 |
| 4 | -1.79351615 | 2.54059923 | 2.77364732 | 57.848220 |

### Exercice 173 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.67277710 | 1.52923543 | 3.81749579 | 49.878955 |
| 2 | 1.90032820 | 1.92070905 | 3.17239556 | 54.524094 |
| 3 | 2.60546377 | 0.54319351 | 3.20639415 | 53.378229 |
| 4 | 1.70975777 | 1.23503438 | 3.59386735 | 52.814448 |

### Exercice 174 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.99551410 | 1.06807771 | 2.69268813 | 44.729319 |
| 2 | 2.65889992 | 2.47747041 | 2.03883684 | 43.387693 |
| 3 | 2.73506866 | 2.11637907 | 2.32482325 | 44.336082 |
| 4 | 2.83535667 | 2.50996539 | 1.73933619 | 42.379335 |

### Exercice 175 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.35683675 | 0.30638234 | 3.42285181 | 0.796179 |
| 2 | 2.16901977 | 0.94087813 | 3.43140870 | 1.544875 |
| 3 | 2.21059361 | 1.16240331 | 3.33564964 | 1.847710 |
| 4 | 3.08018660 | 1.65304681 | 2.26811615 | 2.200989 |

### Exercice 176 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.94944994 | 2.68951576 | 3.03801150 | 5.777025 |
| 2 | -1.18031915 | 2.18861445 | 3.34384174 | 5.324665 |
| 3 | -1.30340923 | 2.35718319 | 3.17950875 | 5.659696 |
| 4 | 0.04690472 | 2.73286733 | 3.14542528 | 4.227241 |

### Exercice 177 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.55821301 | 2.21197116 | 3.48712573 | 18.543108 |
| 2 | -1.90032558 | 1.74730534 | 3.27110851 | 21.126580 |
| 3 | -1.24135492 | 1.63393936 | 3.62680910 | 19.510406 |
| 4 | -1.18245135 | 2.32853583 | 3.24718244 | 20.448736 |

### Exercice 178 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.83050124 | 1.94189346 | 3.59218340 | 94.578843 |
| 2 | 0.41452194 | 1.16792870 | 3.97851457 | 97.127884 |
| 3 | 1.24686801 | 2.38568330 | 3.18092745 | 93.286079 |
| 4 | 0.02850400 | 2.66086392 | 3.20678262 | 93.773293 |

### Exercice 179 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.49906836 | -0.79335695 | 3.23878159 | 15.257349 |
| 2 | 2.88662162 | -0.73774800 | 2.91334989 | 14.931732 |
| 3 | 2.20025600 | -1.52934786 | 3.19130580 | 15.048357 |
| 4 | 2.57117234 | -1.19567792 | 3.05350474 | 14.800935 |

### Exercice 180 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.19523503 | -0.93939533 | 4.05510589 | 48.574759 |
| 2 | 0.07803874 | -1.46277419 | 3.90111083 | 51.097281 |
| 3 | 0.69266312 | -1.55141804 | 3.80496832 | 51.473685 |
| 4 | -0.28904051 | -2.09833610 | 3.58857984 | 53.971125 |

### Exercice 181 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.53757171 | 0.64955781 | 4.08087679 | 64.250078 |
| 2 | 0.23128076 | 1.67614496 | 3.80808500 | 69.711398 |
| 3 | -0.52012496 | 0.70108841 | 4.07460540 | 65.849835 |
| 4 | 0.10657104 | 1.17071742 | 3.99781533 | 67.407551 |

### Exercice 182 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.81489926 | 1.92976037 | 3.60228097 | 43.720688 |
| 2 | 0.03365947 | 0.94284989 | 4.05886255 | 38.881012 |
| 3 | -0.44796393 | 1.71527268 | 3.77115792 | 41.596391 |
| 4 | 0.19466542 | 0.97317504 | 4.04715947 | 39.180876 |

### Exercice 183 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.40752931 | 1.69769351 | 2.94721962 | 57.537422 |
| 2 | 2.73837404 | 0.80253649 | 3.03672634 | 58.687066 |
| 3 | 2.11478404 | 0.14225682 | 3.58774519 | 58.086118 |
| 4 | 2.04415413 | 1.02694265 | 3.48299968 | 58.001227 |

### Exercice 184 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.70766357 | 2.19479376 | 2.28383503 | 54.830808 |
| 2 | 3.03185282 | 2.29061419 | 1.71038568 | 52.924869 |
| 3 | 2.97234155 | 2.31631802 | 1.77885374 | 53.171920 |
| 4 | 2.75151184 | 2.10958413 | 2.31155824 | 54.916804 |

### Exercice 185 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.16966265 | -0.15448387 | 3.99655953 | 75.949129 |
| 2 | 1.87627616 | 0.28638705 | 3.70972160 | 79.288107 |
| 3 | 1.43999288 | 0.82602945 | 3.82211459 | 76.865019 |
| 4 | 2.26101775 | 0.04791969 | 3.49999522 | 81.221928 |

### Exercice 186 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.59328877 | 0.78298733 | 3.16642516 | 29.202117 |
| 2 | 3.72730070 | 0.53155356 | 1.78581757 | 27.227057 |
| 3 | 3.38695306 | 0.27349675 | 2.41209713 | 28.570301 |
| 4 | 3.58782015 | 1.16850701 | 1.76822002 | 27.062389 |

### Exercice 187 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.92342751 | 0.71057661 | 4.00085323 | 40.608459 |
| 2 | -1.80514894 | 0.05517287 | 3.75537712 | 40.246526 |
| 3 | -1.69201297 | 1.64296380 | 3.43543682 | 36.811574 |
| 4 | -0.23785819 | 1.46682079 | 3.89311242 | 40.719413 |

### Exercice 188 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.67555750 | -1.25473238 | 3.91583105 | 51.620751 |
| 2 | -0.01693009 | -2.23906287 | 3.51436693 | 56.404459 |
| 3 | -0.06490229 | -2.15165094 | 3.56800365 | 56.007813 |
| 4 | 0.96097376 | -0.96056674 | 3.93932800 | 50.297718 |

### Exercice 189 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -1.30404873 | 2.28966795 | 3.22821029 | 56.825743 |
| 2 | -1.25517614 | 1.15640152 | 3.80154343 | 54.583491 |
| 3 | -1.66335717 | 1.67306051 | 3.43490546 | 56.676672 |
| 4 | -1.47778679 | 2.49574583 | 2.99196642 | 57.380764 |

### Exercice 190 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.88405583 | 0.49900789 | 4.04152205 | 47.121499 |
| 2 | 1.71073547 | -0.70909636 | 3.73296539 | 51.514447 |
| 3 | 1.94378603 | -0.79267489 | 3.59969811 | 52.641261 |
| 4 | 1.30008458 | -0.02372322 | 3.95900005 | 49.397958 |

### Exercice 191 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 0.21212699 | -0.05714962 | 4.16127386 | 22.149972 |
| 2 | -0.84482879 | 1.42470260 | 3.82373520 | 30.748531 |
| 3 | 0.24126541 | 2.03436912 | 3.62871842 | 32.374782 |
| 4 | 0.17164426 | 0.14732968 | 4.16092493 | 23.212436 |

### Exercice 192 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.58241423 | -0.42774513 | 3.83111777 | 76.323300 |
| 2 | 0.35623176 | -0.34130438 | 4.13776200 | 70.168248 |
| 3 | 0.58836029 | -1.09469854 | 3.97742773 | 71.339010 |
| 4 | 2.27594030 | -0.32889986 | 3.47510931 | 79.662942 |

### Exercice 193 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.66680309 | 2.23194070 | 3.09914057 | 37.512400 |
| 2 | 2.60902066 | 1.70611234 | 2.76525876 | 37.269275 |
| 3 | 2.88493090 | 2.12307271 | 2.12936612 | 35.570227 |
| 4 | 2.39470466 | 2.55583114 | 2.25778228 | 35.805319 |

### Exercice 194 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 3.08426881 | 0.81502991 | 2.68094690 | 5.283845 |
| 2 | 2.30231337 | 1.42163589 | 3.16903276 | 4.738037 |
| 3 | 3.58255949 | -0.08704230 | 2.12653596 | 4.008999 |
| 4 | 2.89914153 | 1.28713144 | 2.70235733 | 4.966641 |

### Exercice 195 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.14407705 | 0.27551876 | 3.56251135 | 0.342733 |
| 2 | 1.76789065 | 1.06233045 | 3.62083979 | 0.992878 |
| 3 | 2.31758679 | 1.35944617 | 3.18514704 | 3.078915 |
| 4 | 2.86657160 | 0.70861781 | 2.94025376 | 3.034266 |

### Exercice 196 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 3.12839993 | -0.02829914 | 2.75259462 | 46.187196 |
| 2 | 3.53146850 | 0.27780397 | 2.19454307 | 44.941104 |
| 3 | 3.18674870 | -0.14645509 | 2.68097887 | 46.074613 |
| 4 | 2.90426861 | 0.10219381 | 2.98651040 | 46.449457 |

### Exercice 197 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.34996428 | 1.03160240 | 3.28297555 | 38.642357 |
| 2 | 2.79931483 | 0.81429721 | 2.97745204 | 39.091048 |
| 3 | 2.28567308 | 1.16031533 | 3.28539663 | 38.615273 |
| 4 | 2.25989329 | 1.96792708 | 2.89561900 | 38.600348 |

### Exercice 198 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 2.26374522 | 0.05295370 | 3.49815917 | 9.973734 |
| 2 | 2.65444926 | 0.31641697 | 3.19659874 | 10.733585 |
| 3 | 3.00595598 | 0.16464489 | 2.88124709 | 11.376362 |
| 4 | 2.73888437 | -0.24675553 | 3.13082868 | 11.102571 |

### Exercice 199 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | 1.97910299 | 0.18924103 | 3.66221290 | 70.117726 |
| 2 | 2.13055857 | 0.76191215 | 3.49923908 | 71.935429 |
| 3 | 2.09010502 | 0.56072036 | 3.56111187 | 71.366288 |
| 4 | 1.58086478 | 1.13424740 | 3.68494416 | 70.993314 |

### Exercice 200 .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Satellite | x | y | z | t |
| 1 | -0.10021765 | 1.15410992 | 4.00280537 | 18.367977 |
| 2 | -0.08363301 | 1.93196272 | 3.69120437 | 16.145545 |
| 3 | 0.52969500 | 1.87508614 | 3.68346838 | 15.594554 |
| 4 | 0.45143200 | 1.77392915 | 3.74350753 | 15.937082 |