**Working with Random Number Tables**

A random number table is a list of digits that can be used to generate numbers that are random or to simulate various experiments. The digits in the random number table attaches are listed in such a way to enable easy reading.

Step 1 Determine how many digits you need your random numbers have to be.

Step 2 Chose any single digit on table as a starting point.

Step 3 Choose a direction (right, left, up or down) in which you will read the numbers from the table. You will read the numbers in this direction for all random numbers selected for the sample.

Step 4 In the direction you chose, read the number of digits required. Numbers that are repeated and not within the range needed are discarded. Continue reading the numbers in the chosen direction until all random numbers have been selected.

https://mathbitsnotebook.com/Algebra2/Statistics/STrandomtable.html

**Due: 19th January 2024,3pm**
**Fill in the table below and upload photo as pdf file onto moodle**
**and** Enter the below data appropriately in the Google spreadsheet

**Ground Rules:** Please do the best you can with the information given. You may consult any of your classmates on how to do the problem but please do the problems by yourself. *Please do not copy.*

1. Select 5 students randomly from a group of 9 students using the random number table.

   *Record the numbers selected here:*

| Student 1 | Student 2 | Student 3 | Student 4 | Student 5 |
|---|---|---|---|---|
| | | | | |

2. In the student's hostel of 99 residents among the 8 supreme council members, 2 will be randomly chosen as Spokespersons. Use a random number table to choose the 2 spokespersons.

   *Record the numbers selected here:*

| Council 1 | Council 2 |
|---|---|
| | |

3. In a class of 33 students, 5 students are randomly selected to introduce speakers in the student colloquium.Use a random number table to choose the 5

   *Record the numbers selected here:*

| | |
|---|---|
| Student 1 | |
| Student 2 | |
| Student 3 | |
| Student 4 | |
| Student 5 | |

4. In a Do-Better-Than-AI (honours) class of second year in 2067 there are 100 students. 35 of them are going to take AI Number Theory as elective in their sixth semester, 24 of them are going to take ProbabilAI III and the rest are taking other electives. Use a random number table to choose 4 students randomly from those who are taking AI Number theory, 3 students randomly from those who are taking ProbabilAI and 5 students randomly from the rest.

*Record the numbers selected here:*

| | |
|---|---|
| AI 1 | |
| AI 2 | |
| AI 3 | |
| AI 4 | |
| ProbabilAI 1 | |
| ProbabilAI 2 | |
| ProbabilAI 3 | |
| Other 1 | |
| Other 2 | |
| Other 3 | |
| Other 4 | |
| Other 5 | |

5. Simulate 25 coin tosses using any of the random number tables given below.

*Record the tosses selected here:*

| | | | | |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

## TABLE 1 - RANDOM DIGITS

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 11164 | 36318 | 75061 | 37674 | 26320 | 75100 | 10431 | 20418 | 19228 | 91792 |
| 21215 | 91791 | 76831 | 58678 | 87054 | 31687 | 93205 | 43685 | 19732 | 08468 |
| 10438 | 44482 | 66558 | 37649 | 08882 | 90870 | 12462 | 41810 | 01806 | 02977 |
| 36792 | 26236 | 33266 | 66583 | 60881 | 97395 | 20461 | 36742 | 02852 | 50564 |
| 73944 | 04773 | 12032 | 51414 | 82384 | 38370 | 00249 | 80709 | 72605 | 67497 |
| | | | | | | | | | |
| 49563 | 12872 | 14063 | 93104 | 78483 | 72717 | 68714 | 18048 | 25005 | 04151 |
| 64208 | 48237 | 41701 | 73117 | 33242 | 42314 | 83049 | 21933 | 92813 | 04763 |
| 51486 | 72875 | 38605 | 29341 | 80749 | 80151 | 33835 | 52602 | 79147 | 08868 |
| 99756 | 26360 | 64516 | 17971 | 48478 | 09610 | 04638 | 17141 | 09227 | 10606 |
| 71325 | 55217 | 13015 | 72907 | 00431 | 45117 | 33827 | 92873 | 02953 | 85474 |
| | | | | | | | | | |
| 65285 | 97198 | 12138 | 53010 | 94601 | 15838 | 16805 | 61004 | 43516 | 17020 |
| 17264 | 57327 | 38224 | 29301 | 31381 | 38109 | 34976 | 65692 | 98566 | 29550 |
| 95639 | 99754 | 31199 | 92558 | 68368 | 04985 | 51092 | 37780 | 40261 | 14479 |
| 61555 | 76404 | 86210 | 11808 | 12841 | 45147 | 97438 | 60022 | 12645 | 62000 |
| 78137 | 98768 | 04689 | 87130 | 79225 | 08153 | 84967 | 64539 | 79493 | 74917 |
| | | | | | | | | | |
| 62490 | 99215 | 84987 | 28759 | 19177 | 14733 | 24550 | 28067 | 68894 | 38490 |
| 24216 | 63444 | 21283 | 07044 | 92729 | 37284 | 13211 | 37485 | 10415 | 36457 |
| 16975 | 95428 | 33226 | 55903 | 31605 | 43817 | 22250 | 03918 | 46999 | 98501 |
| 59138 | 39542 | 71168 | 57609 | 91510 | 77904 | 74244 | 50940 | 31553 | 62562 |
| 29478 | 59652 | 50414 | 31966 | 87912 | 87154 | 12944 | 49862 | 96566 | 48825 |
| | | | | | | | | | |
| 96155 | 95009 | 27429 | 72918 | 08457 | 78134 | 48407 | 26061 | 58754 | 05326 |
| 29621 | 66583 | 62966 | 12468 | 20245 | 14015 | 04014 | 35713 | 03980 | 03024 |
| 12639 | 75291 | 71020 | 17265 | 41598 | 64074 | 64629 | 63293 | 53307 | 48766 |
| 14544 | 37134 | 54714 | 02401 | 63228 | 26831 | 19386 | 15457 | 17999 | 18306 |
| 83403 | 88827 | 09834 | 11333 | 68431 | 31706 | 26652 | 04711 | 34593 | 22561 |
| | | | | | | | | | |
| 67642 | 05204 | 30697 | 44806 | 96989 | 68403 | 85621 | 45556 | 35434 | 09532 |
| 64041 | 99011 | 14610 | 40273 | 09482 | 62864 | 01573 | 82274 | 81446 | 32477 |
| 17048 | 94523 | 97444 | 59904 | 16936 | 39384 | 97551 | 09620 | 63932 | 03091 |
| 93039 | 89416 | 52795 | 10631 | 09728 | 68202 | 20963 | 02477 | 55494 | 39563 |
| 82244 | 34392 | 96607 | 17220 | 51984 | 10753 | 76272 | 50985 | 97593 | 34320 |
| | | | | | | | | | |
| 96990 | 55244 | 70693 | 25255 | 40029 | 23289 | 48819 | 07159 | 60172 | 81697 |
| 09119 | 74803 | 97303 | 88701 | 51380 | 73143 | 98251 | 78635 | 27556 | 20712 |
| 57666 | 41204 | 47589 | 78364 | 38266 | 94393 | 70713 | 53388 | 79865 | 92069 |
| 46492 | 61594 | 26729 | 58272 | 81754 | 14648 | 77210 | 12923 | 53712 | 87771 |
| 08433 | 19172 | 08320 | 20839 | 13715 | 10597 | 17234 | 39355 | 74816 | 03363 |
| | | | | | | | | | |
| 10011 | 75004 | 86054 | 41190 | 10061 | 19660 | 03500 | 68412 | 57812 | 57929 |
| 92420 | 65431 | 16530 | 05547 | 10683 | 88102 | 30176 | 84750 | 10115 | 69220 |
| 35542 | 55865 | 07304 | 47010 | 43233 | 57022 | 52161 | 82976 | 47981 | 46588 |
| 86595 | 26247 | 18552 | 29491 | 33712 | 32285 | 64844 | 69395 | 41387 | 87195 |
| 72115 | 34985 | 58036 | 99137 | 47482 | 06204 | 24138 | 24272 | 16196 | 04393 |
| | | | | | | | | | |
| 07428 | 58863 | 96023 | 88936 | 51343 | 70958 | 96768 | 74317 | 27176 | 29600 |
| 35379 | 27922 | 28906 | 55013 | 26937 | 48174 | 04197 | 36074 | 65315 | 12537 |
| 10982 | 22807 | 10920 | 26299 | 23593 | 64629 | 57801 | 10437 | 43965 | 15344 |
| 90127 | 33341 | 77806 | 12446 | 15444 | 49244 | 47277 | 11346 | 15884 | 28131 |
| 63002 | 12990 | 23510 | 68774 | 48983 | 20481 | 59815 | 67248 | 17076 | 78910 |
| | | | | | | | | | |
| 40779 | 86382 | 48454 | 65269 | 91239 | 45989 | 45389 | 54847 | 77919 | 41105 |
| 43216 | 12608 | 18167 | 84631 | 94058 | 82458 | 15139 | 76856 | 86019 | 47928 |
| 96167 | 64375 | 74108 | 93643 | 09204 | 98855 | 59051 | 56492 | 11933 | 64958 |
| 70975 | 62693 | 35684 | 72607 | 23026 | 37004 | 32989 | 24843 | 01128 | 74658 |
| 85812 | 61875 | 23570 | 75754 | 29090 | 40264 | 80399 | 47254 | 40135 | 69916 |