

Statistical Reasoning
Picking a Simple Random Sample

Name:

Below is a list of all the national parks in the United States.

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|---|---|--|
| 1 <u>Acadia National Park</u> | 21 <u>Glacier National Park</u> | 40 <u>Mesa Verde National Park</u> |
| 2 <u>Arches National Park</u> | 22 <u>Grand Canyon National Park</u> | 41 <u>Mount Rainier National Park</u> |
| 3 <u>Badlands National Park</u> | 23 <u>Grand Teton National Park</u> | 42 <u>National Park of American Samoa</u> |
| 4 <u>Big Bend National Park</u> | 24 <u>Great Basin National Park</u> | 43 <u>North Cascades National Park</u> |
| 5 <u>Biscayne National Park</u> | 25 <u>Great Sand Dunes National Park</u> | 44 <u>Olympic National Park</u> |
| 6 <u>Black Canyon of the Gunnison National Park</u> | 26 <u>Great Smoky Mountains National Park</u> | 45 <u>Petrified Forest National Park</u> |
| 7 <u>Bryce Canyon National Park</u> | 27 <u>Guadalupe Mountains National Park</u> | 46 <u>Redwood National Park</u> |
| 8 <u>Canyonlands National Park</u> | 28 <u>Haleakala National Park</u> | 47 <u>Rocky Mountain National Park</u> |
| 9 <u>Capitol Reef National Park</u> | 29 <u>Hawaii Volcanoes National Park</u> | 48 <u>Saguaro National Park</u> |
| 10 <u>Carlsbad Caverns National Park</u> | 30 <u>Hot Springs National Park</u> | 49 <u>Sequoia National Park</u> |
| 11 <u>Channel Islands National Park</u> | 31 <u>Isle Royale National Park</u> | 50 <u>Shenandoah National Park</u> |
| 12 <u>Congaree National Park</u> | 32 <u>Joshua Tree National Park</u> | 51 <u>Theodore Roosevelt National Park</u> |
| 13 <u>Crater Lake National Park</u> | 33 <u>Katmai National Park</u> | 52 <u>Virgin Islands National Park</u> |
| 14 <u>Cuyahoga Valley National Park</u> | 34 <u>Kenai Fjords National Park</u> | 53 <u>Voyageurs National Park</u> |
| 15 <u>Death Valley National Park</u> | 35 <u>Kings Canyon National Park</u> | 54 <u>Wind Cave National Park</u> |
| 16 <u>Denali National Park</u> | 36 <u>Kobuk Valley National Park</u> | 55 <u>Wrangell-St. Elias National Park</u> |
| 17 <u>Dry Tortugas National Park</u> | 37 <u>Lake Clark National Park</u> | 56 <u>Yellowstone National Park</u> |
| 18 <u>Everglades National Park</u> | 38 <u>Lassen Volcanic National Park</u> | 57 <u>Yosemite National Park</u> |
| 19 <u>Gates of the Arctic National Park</u> | 39 <u>Mammoth Cave National Park</u> | 58 <u>Zion National Park</u> |
| 20 <u>Glacier Bay National Park</u> | | |

Describe a method of picking 10 random national parks if given a string of random digits.

- ① Number all individuals
- ② Break random digits into 2-digit numbers
- ③ Match 2-digit numbers to parks (ignore repeats and skip #s that don't match w/ a park)

Use your method along with the random digits below to randomly select 10 national parks.

61424	20419	86546	00517	02429	19761	15370	43882
90222	27993	04952	66762	90519	61988	40164	15815
50349	71146	97668	86523	20631	88967	19660	89624
85676	10005	08216	25906	89990	78733	16447	27932