

AP Statistics – Chapter 11

Name: _____

Listed below are the names of 20 students who are juniors. Use the random numbers listed below to select five of them to be in your sample. Clearly explain your method.

Adam	Chris	Dave	Deirdre	Dick
Ellen	Eric	Joan	John	Judi
Joy	Kenny	Laura	Mary	Paul
Peter	Rachel	Rob	Sara	Stacey

04028 55259 81183 40754 60209 06765 27306

28370 82669 83236 77479 90618 43707 78695

A large manufacturer of batteries knows that, historically, 10% of its batteries come off the production line defective, and the remaining 90% of batteries come off the production line in working condition. Conduct a simulation to estimate how many batteries the company needs to pull off the production line in order to be sure of ending up with 10 working batteries.

1. Describe how you will use a random number table to conduct this simulation.

2. Show three trials by clearly labeling the random number table given below. Specify the outcome of each trial.

Trial 1: 10242 50692 18977 28370 82669 83236 77479 90618 43707 78695

Trial 2: 81183 48554 60809 39996 81915 25404 33366 92082 04822 79866

Trial 3: 06765 67041 20479 54612 13411 36837 69983 53082 43589 27865

3. State your conclusion.