Below is the 2019 roster for the New England Patriots. Use this to answer the following. Number all players down the columns and not the rows.

| New England Patriots roster view $\mathrm{talk} \cdot$ edit |  |  |  |
| :---: | :---: | :---: | :---: |
| Quarterbacks <br> - 12 Tom Brady <br> - 6 Cody Kessler <br> - 4 Jarrett Stidham <br> Running backs <br> - 38 Brandon Bolden KR <br> - 34 Rex Burkhead <br> - 37 Damien Harris <br> - 26 Sony Michel <br> - 28 James White <br> Wide receivers <br> - 13 Phillip Dorsett <br> - 11 Julian Edelman <br> - 16 Jakobi Meyers <br> - 80 Gunner Olszewski PR <br> - 14 Mohamed Sanu <br> - 18 Matthew Slater <br> Tight ends <br> - 85 Ryan Izzo <br> - 83 Matt LaCosse <br> - 84 Benjamin Watson | Offensive linemen <br> - 61 Marcus Cannon T <br> - 74 Korey Cunningham T <br> - 65 Jermaine Eluemunor G <br> - 66 James Ferentz C <br> - 75 Ted Karras C <br> - 69 Shaq Mason G <br> - 72 Marshall Newhouse T <br> - 62 Joe Thuney G <br> Defensive linemen <br> - 70 Adam Butler DT <br> - 90 Shilique Calhoun DE <br> - 99 Byron Cowart DT <br> - 93 Lawrence Guy DT <br> - 71 Danny Shelton DT <br> - 55 John Simon DE <br> - 50 Chase Winovich DE <br> - 91 Deatrich Wise Jr. DE | Linebackers <br> - 51 Ja'Whaun Bentley MLB <br> - 58 Jamie Collins OLB <br> - 54 Dont'a Hightower OLB <br> - 52 Elandon Roberts MLB <br> - 53 Kyle Van Noy OLB <br> Defensive backs <br> - 29 Justin Bethel CB <br> - 25 Terrence Brooks SS <br> - 23 Patrick Chung SS <br> - 43 Nate Ebner FS <br> - 24 Stephon Gilmore CB <br> - 21 Duron Harmon SS <br> - 27 J. C. Jackson CB <br> - 31 Jonathan Jones CB <br> - 32 Devin McCourty FS <br> - 30 Jason McCourty CB <br> - 33 Joejuan Williams CB <br> Special teams <br> - 7 Jake Bailey P <br> - 49 Joe Cardona LS <br> - 2 Nick Folk K | Reserve lists <br> - 60 David Andrews C (IR) + <br> - 63 Yodny Cajuste OT (NF-Inj.) + <br> - 58 Keionta Davis DE (IR) + <br> - 46 James Develin FB (IR) + <br> - 64 Hjalte Froholdt G (IR) + <br> - 42 Malik Gant S (IR) + <br> - 10 Josh Gordon WR (IR) + <br> - 3 Stephen Gostkowski K (IR) + <br> - 15 N'Keal Harry WR (IR) + <br> - 47 Jakob Johnson FB (IR) + <br> - 36 Brandon King OLB (IR) + <br> - 95 Derek Rivers DE (IR) + <br> - 41 D'Angelo Ross CB (IR) + <br> - 76 Isaiah Wynn OT (IR) + <br> Practice squad <br> - 35 Nate Brooks S <br> - 67 Tyler Gauthier C <br> - 59 Terez Hall OLB <br> - 22 Obi Melifonwu S <br> - 48 Calvin Munson MLB <br> - 17 Devin Ross WR <br> - 92 Nick Thurman DT <br> - 68 Najee Toran G |

1. Take a simple random sample (SRS) of 10 players. Use table b starting at line 171.
2. Take a systematic random sample of 10 players. Use an interval of 7 and table b starting at line 113.
3. Take a stratified random sample of 10 players based on if their jersey number is even or odd. Use table $b$ starting at line 129.
4. Explain the differences between a voluntary response sample and a convenience sample. Do these samples provide accurate information?
5. A bottle of coke is manufactured to contain $\mathbf{2 0}$ ounces. Quality control inspectors test 75 bottles of coke produced in a local factory. These bottles contained an average of $\mathbf{1 7}$ ounces of coke.

Population:
Parameter:
Sample(s):
Statistic(s):
6. A study was performed to find the average height of males and females in the United States. The heights of 121 men were measured and the average height was 74 inches. The heights of 111 women were measured and the average height was 67 inches.

Population:
Sample(s):
Parameter:
Statistic(s):

