

STA2023 Application 1: Random Data Sets

Data Set A: Assume the population values are normally distributed.
Random variable: x = weight of newborn foal in pounds
sample size = 40

55.0	50.4
72.1	41.4
68.9	57.8
64.8	60.1
63.3	54.2
60.6	58.4
49.2	62.2
84.5	47.5
56.1	69.3
64.3	59.3
59.2	68.0
45.4	54.9
50.2	51.1
59.2	65.2
64.5	57.9
82.0	72.8
75.3	51.7
65.0	54.1
59.1	59.1
55.9	49.8

Data Set B: Assume the population values are normally distributed.
Random variable: x = height of 7-year-old child in inches
sample size = 40

50.2	46.3
47.6	47.2
48.0	50.5
46.9	47.1
45.9	51.7
49.9	42.4
45.1	44.9
44.1	42.6
52.0	49.3
45.5	47.0
46.4	49.3
49.5	49.4
47.1	4.6
50.2	48.3
51.7	44.0
47.5	46.7
45.9	46.3
51.5	49.2
46.9	54.3
45.7	50.6

Data Set C: Assume the population values are normally distributed.
Random variable: x = height of an adult beagle, at the shoulders, in cm
sample size = 40

38.1	40.0
42.3	37.5
37.5	39.2
38.3	36.7
36.6	36.7
36.7	39.4
40.0	36.4
36.5	41.5
42.1	39.5
35.9	39.2
35.8	35.7
41.1	34.6
41.4	37.6
38.9	40.5
35.7	38.4
37.0	37.9
38.6	37.1
34.4	41.2
38.1	36.5
39.3	38.3

Data Set D: Assume the population values are normally distributed.
Random variable: x = weight of a peach-faced lovebird in grams
sample size = 40

57.9	49.6
54.4	53.8
49.4	51.2
56.9	53.3
51.8	51.6
53.4	46.0
51.9	59.9
46.8	52.8
53.8	54.3
52.3	53.4
51.5	52.7
52.9	51.9
60.2	55.3
52.6	52.4
55.3	53.9
48.4	52.3
51.4	54.4
53.4	48.6
43.9	53.0
53.0	50.0

Data Set E: Assume the population values are normally distributed.
Random variable: x = weight of a parakeet in grams
sample size = 40

33.7	31.8
31.7	32.4
28.7	32.3
29.3	29.8
27.3	32.7
30.9	25.6
29.1	34.1
28.8	32.5
34.0	29.2
28.6	30.6
31.9	31.6
28.8	29.4
33.4	31.8
29.1	30.9
30.1	30.6
33.0	29.9
30.2	31.5
31.1	31.3
27.1	31.2
30.8	32.8