In [6]:

*#* 연습문제 *8 /* 예제*(7.17), p236* **from** math **import** sqrt **from** scipy.stats **import** t

x **=** [19, 11, 14, 17, 23, 11, 15, 19, 11, 8]

y **=** [22, 18, 17, 19, 22, 12, 14, 11, 19,7]

d **=** [a **-** b **for** a, b **in** zip(x, y)] n **=** len(d)

d\_bar **=** sum(d) **/** n

s\_d **=** sqrt(sum((x **-** d\_bar)**\*\***2 **for** x **in** d) **/** (n **-** 1)) t\_value **=** t**.**ppf(0.975, n **-** 1)

lower **=** d\_bar **-** t\_value **\*** s\_d **/** sqrt(n) upper **=** d\_bar **+** t\_value **\*** s\_d **/** sqrt(n)

print(f"95% 신뢰구간 : ({round((lower), 2)}, {round((upper), 2)})\n95% 신뢰구간 : {round((lower), 2)} < mu(D) < {round((upper), 2)}")

95% 신뢰구간 : (-4.55, 1.95)

95% 신뢰구간 : -4.55 < mu(D) < 1.95

Loading [MathJax]/jax/output/CommonHTML/fonts/TeX/fontdata.js