

Stat 200 Section #201

Results from tossing 2 coins 30 times (x=0,1,2)

0, 0, 2, 1, 1,

0, 2, 2, 1, 2,

1, 1, 1, 1, 1

2, 2, 1, 1, 1

0, 1, 1, 2, 2

1, 1, 1, 0, 1

$$\bar{x} = 1.1$$

$$s^2 = \frac{(0-1.1)^2 \times 5 + (1-1.1)^2 \times 17 + (2-1.1)^2 \times 8}{29}$$

$$s^2 = \frac{0.05 + .17 + 0.48}{29}$$

$$s = \sqrt{.4379} = .6617$$

$$s/\sqrt{n} = .6617/\sqrt{30} = .12081$$

$$\bar{x} - s/\sqrt{n} = .97919$$

$$\bar{x} + s/\sqrt{n} = 1.22081$$

| name    | n  | $\bar{x}$ | s     | $s/\sqrt{n}$ | $\bar{x} - s/\sqrt{n}$ | $\bar{x} + s/\sqrt{n}$ | count 1? | NO?    |
|---------|----|-----------|-------|--------------|------------------------|------------------------|----------|--------|
| Angie   | 30 | .83       | .75   | .137         | .693                   | .967                   | no       | .268   |
| Tim     | 30 | .833      | .834  | .152         | .678                   | .982                   | no       | .298   |
| Takhyun | 30 | 1         | .6433 | .1174        | .8826                  | 1.8826                 | yes      | .2285  |
| Sarah   | 30 | 1.1       | .6617 | .12081       | .97919                 | 1.22081                | yes      | .23678 |
| Jenn    | 30 | 1.033     | .718  | .131         | .902                   | 1.164                  | yes      | .257   |
| James   | 30 | 1.1       | .7589 | .1386        | .9614                  | 1.239                  | yes      | .2717  |
| Tiffany | 30 | 1.2       | .616  | .1113        | 1.087                  | 1.313                  | no       | .218   |
| Orion   | 30 | .80       | .707  | .129         | .671                   | .929                   | no       | .25284 |
| Rachel  | 30 | 1.13      | .819  | .149         | .981                   | 1.279                  | yes      | .293   |
| Azweigh | 30 | .966      | .718  | .131         | .835                   | 1.097                  | yes      | .257   |
| Markelo | 30 | 1.033     | .718  | .131         | .899                   | 1.161                  | yes      | .257   |
| Emily   | 30 | 1         | .735  | .1346        | .863                   | 1.0837                 | yes      | .246   |