

WAS THE TEQ TYPICAL?

Expected Attendance $\mu = \sum N_i p_i$

$$\mu = 28(0.25) + 38(0.5) + 56(0.75) + 28(1.00) \\ = 96$$

VARIANCE & SD

Bernoulli r.v so variance is $\sigma^2 = \sum N_i p_i (1 - p_i)$

$$\bullet 28 \times 0.25 \times 0.75 = 5.25$$

$$\bullet 38 \times 0.5 \times 0.5 = 9.50$$

$$\bullet 56 \times 0.75 \times 0.25 = 10.50$$

$$\bullet 28 \times 1.00 \times 0 = 0$$

$$\sigma^2 = 5.25 + 9.5 + 10.5 = 25.25$$

$$\sigma = 5.0$$

$$N_{obs} = 97$$

$$\mu \pm \sigma = 96 \pm 5 \Rightarrow [91, 101]$$

Since $97 \in [91, 101]$

the observed attendance lies well within this