

CHAPTER 23: COMPARING MEANS

When comparing means, we will use _____. The corresponding hypothesis test is called the _____.

Difference of means (of the sample) $\rightarrow H_0$: _____

Standard deviation for the difference (of the sample) \rightarrow

Margin of error for sample \rightarrow

T-model Conditions & Assumptions

- Randomization –
- 10% -
- Independent –
- Nearly Normal Condition –

1. The data below show the sugar content (as percentage of weight) of several national brands of children's and adult's cereals.

Children's cereal: 40.3, 55, 45.7, 43.3, 50.3, 45.9, 53.5, 43, 44.2, 44, 47.4, 44, 33.6, 55.1, 48.8, 50.4, 37.8, 60.3, 46.6

Adult's cereal: 20, 30.2, 2.2, 7.5, 4.4, 22.2, 16.6, 14.5, 21.4, 3.3, 6.6, 7.8, 10.6, 16.2, 14.5, 4.1, 15.8, 4.1, 2.4, 3.5, 8.5, 10, 1, 4.4, 1.3, 8.1, 4.7, 18.4

Step 1: Determine the mean, standard deviation, and sample size for each sample

Step 2: Check the conditions

Step 3: Run a two-sample t-test