	mean	Standard deviation	size
Girls	75	8	60
Boys	73	10	100

$n_1 = 60$
$n_2 = 100$
$\bar{x}_1 = 75$
$\bar{x}_2 = 73$
$S_1 = 8$
$S_2 = 10$

$H_0 : S_1 = S_2$, There is no significant diff b/w mean scores

$H_A : S_1 \neq S_2$, There is significant diff b/w mean scores

$$Z = \frac{\bar{x}_1 - \bar{x}_2}{\sigma_{\bar{x}_1 - \bar{x}_2}}$$

$$\sigma_{\bar{x}_1 - \bar{x}_2} = \sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}$$

$$= \sqrt{\frac{8^2}{60} + \frac{10^2}{100}}$$

$$= \sqrt{\frac{64}{60} + \frac{100}{100}}$$

$$= \sqrt{\frac{16}{15} + 1}$$

$$= \sqrt{\frac{16+15}{15}}$$

$$= \sqrt{\frac{31}{15}}$$

$$= \sqrt{2.067}$$

$$\sigma_{\bar{x}_1 - \bar{x}_2} = 1.4377$$

$$Z = \frac{\bar{x}_1 - \bar{x}_2}{\sigma_{\bar{x}_1 - \bar{x}_2}}$$

$$= \frac{75 - 73}{1.4377}$$

$$= \frac{2}{1.4377}$$

$$Z = 1.3911$$

At 5% level of significance

$$Z_{tab} = 1.96$$

$$Z_{cal} = 1.3911$$

$$Z_{cal} < Z_{tab}$$

So, Null hypothesis is accepted

Therefore There is no significant diff b/w mean scores.