To test employees claim let's test null and alternative hypotheses:

$$H_0: \mu = 45000$$

$$H_1: \mu < 45000$$

Test statistics:

$$t = \frac{\bar{x} - \mu}{s/\sqrt{n}}$$

In our case:

$$\mu = 45000$$

$$\bar{x} = 43500$$

$$s = 5200$$

$$n = 30$$

Substituting values into the formula we get:

$$t = \frac{\bar{x} - \mu}{s/\sqrt{n}} = \frac{43500 - 45000}{5200/\sqrt{30}} = -1.58$$

At $\alpha = 1 - 0.95 = 0.05$ we have such critical value:

$$t_{\alpha,n-1} = t_{0.05,29} = -1.7$$

Since $t > t_{critical}$ we do not reject H_0. There is no sufficient evidence to conclude that salary is less than 45000.