QUESTION 3.4

STEP 1: HYPOTHESES

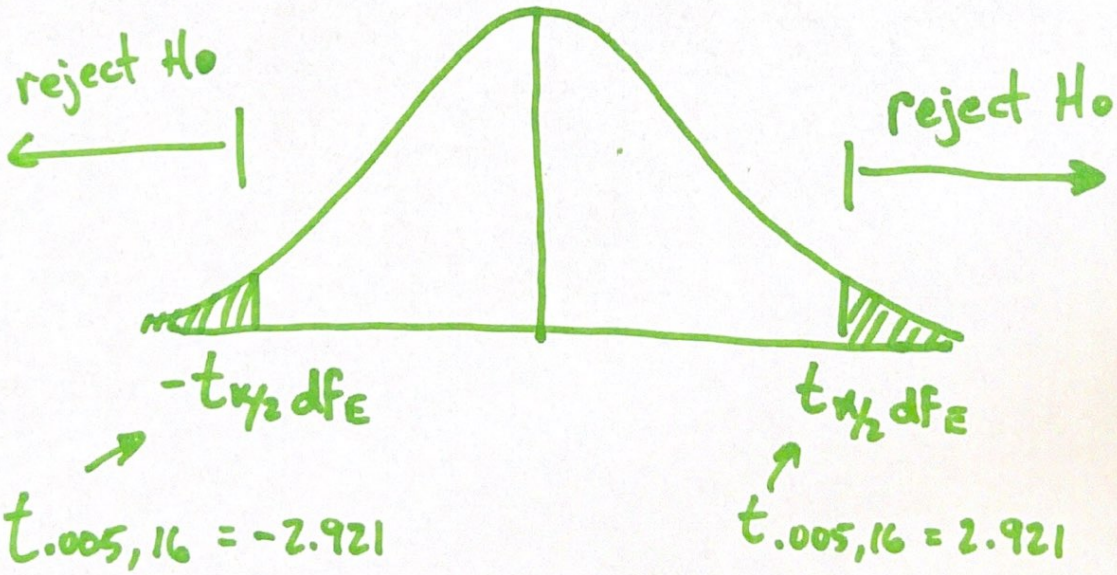
$H_0: \beta_2 = 0$ (insulation is not related to heating cost)

$H_1: \beta_2 \neq 0$ (insulation is related to heating cost)

STEP 2: SIGNIFICANCE LEVEL

$\alpha = 0.01$

STEP 3: REJECTION REGION



REJECT IF $t < -2.921$ OR $t > 2.921$

STEP 4: TEST STATISTIC

$$t_2 = -2.3778$$

STEP 5: CONCLUSION

Do not reject the Ho. There is not enough evidence at the 1% significance level to infer that a relationship exists between insulation and heating costs.