CHRIS DIONNE

A tire supplier claims that the treadlife of its tires has a mean of 32,000 miles. The buyer has doubts

State the suitable and alternative hypothesis to test this claim.

A testing agency randomly selects 25 vehicles. He puts the new tires on the vehicles and runs the tires to failure. If m_i is the mileage of the ith tire.

$$\sum_{i=1}^{25} m_i = 794,000$$

and

$$\sum_{i=1}^{25} m_i^2 = 25,230,249,423$$

What is the sample mean of the mileage?

What is the sample variance of the mileage?

What is the standard error of the average mileage?

What is the 90% confidence interval for the mean mileage?

Test hypothesis at $\alpha = .05$