MA 244 Homework 04

a. RATO = 6.68 + 0.00479 · WIAME TER

The coefficients 6.68 and 0.00479 are the intercept and shape of the live, respectivly.

b. The vale of SSE. which is the residul sum of squees. is green in the private as 0.587. The last squees be that maintains the SSE. Thefe. there is no other line with an analyce even that has a surther SSE than the last squees line. If the were, then that line muld be the but squees line instant.

C. Ĝo is 6.6782, utich iz the estimated whe of KATO when the dimmater is o. In prosted terms, this weld represent the base cost vertic of regime to replanest when as pipe is involved, which about make two much sense in this contact. But it's necessary for the base marked.

Bi is 0.0027856. This is the estimated change in NATO for a carwit increase in the diameter of the pipe. In product turns, this means that for each additional millimeter of pipe channels, the ratio of repair to replacement cost increases by approximately 0.00079. This suggests that larger pipes are more cost-efferre to repair the replace, campail to smith pipes.

11.61 fine se pristert. se pube for se WidstETER pudierter is vivo. which is bes show se synfrom had of out. The mene that ne can reject se will hyposter shot se confining of WidstETER is zero. In other unds, there is sonry evidence to suggest set se cast sorts also includ incurse bruby with pipe climater.

Gjim i

The creptiment for DIAMETER is 0.0007856, and the second ener of this creptiment is 0.0003213.

Cufficient + + + whe . SE)

But in ole & Tuble, ole & whe for a 95% cuficlen intent with 11 chegins of Jundow My = n-2) is approximatly 2.20/

0.0047356 ± 2.2/x 0.00343 -> (0.00403, 0.00549)

The mens that we are 95% cufilent that the the increase in cust partic for early 1 willinger increase in pipe climater here within this interval.

84.11

An
$$\frac{1}{9}$$
 is the signal
signal \cdot both $\frac{1}{7} + \frac{1}{250} \cdot \frac{1}{7} + \frac{1}{250} \cdot \frac{1}{7} \cdot \frac{1}{7} + \frac{1}$