

```

> ##b
> q1a_fare <- lm(formula = fare ~ dist + pass + lead_fare, data = air)
> summary(q1a_fare)

Call:
lm(formula = fare ~ dist + pass + lead_fare, data = air)

Residuals:
    Min     1Q   Median     3Q      Max
-68.550  -5.583  -0.617   5.356  52.602

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept) 20.1126884  1.0004112  20.104 < 2e-16 ***
dist         0.0041268  0.0006134   6.728 2.90e-11 ***
pass        -0.0018615  0.0004272  -4.358 1.45e-05 ***
lead_fare    0.8410101  0.0063028 133.435 < 2e-16 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 10.29 on 996 degrees of freedom
Multiple R-squared:  0.9656, Adjusted R-squared:  0.9655
F-statistic: 9312 on 3 and 996 DF, p-value: < 2.2e-16

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From the result of summary of mode fare, the t value of lead fare is significant at the 5% level. Thus there is significant evidence AGAINST of a nonlinear effect of lead_fare on average fare, in the presence of dist and pass.