

NAME _____

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MATH 156.6 — QUIZ VI

The level of nitrogen oxides (NOX) in the exhaust of cars of a particular model varies Normally with mean .2 grams per mile (g/mi) and standard deviation .05 g/mi . Government regulations require NOX emissions no higher than .3 g/mi .

- (a) What is the probability that a single car of this model fails to meet the NOX requirement?
- (b) A company has 25 cars of this model in its fleet. What is the probability that the average NOX level \bar{X} of these cars is above the .3 g/mi limit?