

Corvette Problem

Name: _____

In June 2013, a 1998 Corvette raced down the quarter mile drag strip at the Route 66 Raceway in Joliet, Illinois. This Corvette crossed the finish line at a speed of 116.14 mph, and the following data was provided on a time slip after the race:

Distance	Time
0 feet	0.734 seconds
60 feet	2.063 seconds
330 feet	5.387 seconds
$\frac{1}{8}$ mile	8.025 seconds
1000 feet	10.312 seconds
$\frac{1}{4}$ mile	12.259 seconds

For sports cars, a common measure of performance is the number of seconds it takes the car to accelerate from 0 to 60 mph. So the driver of this Corvette would like to know, according to this data, how many seconds it took him to reach a speed of 60 mph. Your task is to determine this time, and support your claim mathematically. Include an explanation in words and a graph, if necessary.