Quiz #2
ENGR 102 (Spears)

Follow good coding practice as discussed in class, and include the standard header and useful code comments.

An Ag was going to visit mom for the weekend. There are two roads home, one with a speed limit of 70mph, and the other with a speed limit of 55mph. Both are exactly 202.3 miles of driving. Through painful calculations, our Ag created a model of their car's fuel usage:

$$MPG = -5.9852 + 1.6052*V_{MPH} - 0.0141*(V_{MPH})^2$$

The result (MPG) is a value in miles travelled per gallon of fuel, where the input V_{MPH} is the car velocity in miles per hour (MPH).

Write a program that:

- asks the user to input the current price of fuel, in $/gal
- calculates how much time it will take to arrive using the 70mph road, and how much longer this is than taking the 55mph road (in minutes)
- calculates how much it will cost to take the 70mph road, and how much more this costs compared to the 55mph road.
- Round time values to the nearest minute, and dollar values to the nearest cent (hundredths).

  hint: the round(a,b) function has two arguments; the first is the value you will round, the second is how many decimals to include. E.g., round(58.394,1) = 58.4.

Sample output—your code will provide values in the blanks. For this quiz, your output should look identical to what is provided below:

```
At 70 mph it will take ___ minutes, ___ minutes faster than at 55 mph.
At 70 mph it will cost $___, $___ more than at 55 mph.
```

When finished, copy your code into the submission blank on eCampus.