01.1 - Road Trip

You are planning a road trip with some friends. Before you go, you would like to estimate how much money you will need to budget for fuel. You know that you can use the following formula to estimate the round trip fuel cost

```
cost = (2 * distance) * price/mpg.
```

where cost is the round trip cost of fuel, distance is the distance in miles between your starting point and your destination, price is the average price of fuel in dollars per gallon, and mpg is your vehicle's fuel efficiency in miles per gallon.

Write a program that estimates the round trip fuel cost for you. Your program should ask the user to input the following:

- the distance to your destination, in miles
- the average price of fuel in dollars per gallon
- the fuel efficiency of your vehicle in miles per gallon

Once the input data has been entered, your program should calculate and display the estimated total cost of fuel. Since this is just a rough estimate, we will round the result down to the nearest whole dollar (e.g. if the estimated cost is \$33.57, your program's output should be \$33).

Test your program with the following data:

| Input | | | Output |
|-----------------------|-------|------|--------|
| $\overline{distance}$ | price | mpg | cost |
| 811 | 4.273 | 19.2 | \$360 |
| 1719 | 4.353 | 38.5 | \$388 |
| 1265 | 3.851 | 21.4 | \$455 |

Finally, format your program to match the sample below. Your output should exactly match the sample output, character for character, including all white space and punctuation. User input in the sample has been highlighted in Pappy's Purple to distinguish it from the program's output, but your user input does not need to be colored. Save your finished program as road_trip_login.py, where login is your Purdue login. Then submit it along with a screen-shot showing a run of **all 3** test cases.

```
Terminal

$ python road_trip_login.py
Road trip fuel cost estimator:
   How far away is your destination (miles)? 811
   What is the average price of gas (dollars per gallon)? 4.273
   What is the fuel efficiency of your vehicle (mpg)? 19.2

The fuel cost for this trip is approximately $360.
```

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