

Ratios Lesson 15: Unit Conversion Problem Solving (Modified)



The Northern Route takes them through Canada.

The Southern Route stays in the U.S.

Canada has a different currency, the Canadian dollar, and uses the metric system for measurements.

<u>The Northern Route</u>	<u>The Southern Route</u>
412 kilometers (km) Speed limit is 100 kilometers per hour	362 miles (mi) Speed limit is 55 miles per hour
Average price of gas in the area is \$1.26 Canadian dollars per liter.	Average price of gas in the area is \$3.48 per gallon

Name: _____ HR: _____ Date: _____

Task 1) Find which route is longer by comparing both distances using the same unit of measure. Remember **1 mile \approx 1.6 kilometers**

<u>The Northern Route</u>	<u>The Southern Route</u>
412 kilometers (km)	362 miles (mi)

Which route is longer? _____

Task 2) Find out how much time it will take to travel each route if the Griffins drive the speed limit the entire length.

<u>The Northern Route</u>	<u>The Southern Route</u>
412 kilometers (km) Speed limit is 100 kilometers per hour	362 miles (mi) Speed limit is 55 miles per hour

How much time will it take for the Northern Route?

Name: _____ HR: _____ Date: _____

How much time will it take for the Southern Route?

Task 3) Find out how much it will cost to fill a 15 gallon tank once for each route.

a.) How many liters is 15 gallons? Remember **1 gallon \approx 3.8 liters.**

<u>The Northern Route</u>

b.) How much will the gas cost in Canadian dollars?

<u>The Northern Route</u> Average price of gas in the area is \$1.26 Canadian dollars per liter.

c.) How much will the gas cost in American dollars? Remember **\$1 US \approx \$1.25 Canadian.**

<u>The Northern Route</u>

d.) How much will 15 gallons cost on the Southern Route?

Name: _____ HR: _____ Date: _____

The Northern Route

Average price of gas in the area is \$3.48 US dollars per gallon.

How much will 15 gallons of gas cost on the Northern Route?

How much will 15 gallons of gas cost on the Southern Route?



Task 4) Answer: Which route would you recommend that the Griffins take? Provide evidence for your opinion.

Why do you think that? Be specific. List your reasons:
