

# F-BF Crude Oil and Gas Mileage

## Task

According to the U.S. Energy Information Administration, a barrel of crude oil produces approximately 20 gallons of gasoline. EPA mileage estimates indicate a 2011 Ford Focus averages 28 miles per gallon of gasoline.

- Write an expression for  $G(x)$ , the number of gallons of gasoline produced by  $x$  barrels of crude oil.
- Write an expression for  $M(g)$ , the number of miles on average that a 2011 Ford Focus can drive on  $g$  gallons of gasoline.
- Write an expression for  $M(G(x))$ . What does  $M(G(x))$  represent in terms of the context?
- One estimate (from [www.oilvoice.com](http://www.oilvoice.com)) claimed that the 2010 Deepwater Horizon disaster in the Gulf of Mexico spilled 4.9 million barrels of crude oil. How many miles of Ford Focus driving would this spilled oil fuel?



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