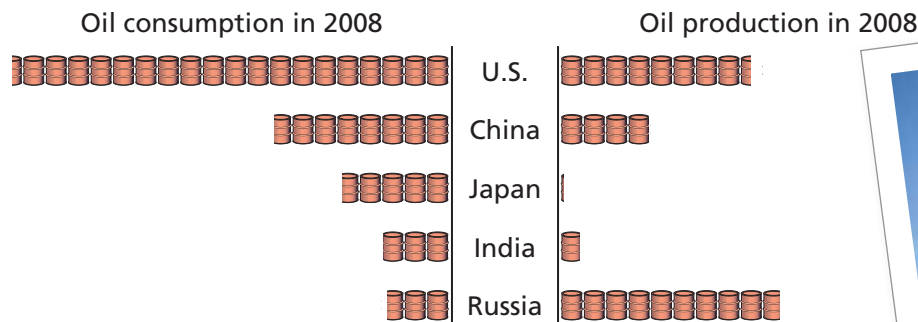


Section 1.2

Oil In Exercises 7–10, use the pictograph.

Top Five Oil-consuming Countries in 2008



Key: = 1,000,000 barrels of oil per day

7. Consider the consumption side of the pictograph.
 - a. Estimate the number of barrels of oil consumed by the United States per day. Write your answer in standard decimal notation.
 - b. For how many years do you think the United States and the rest of the world can continue consuming oil at this rate? Explain your reasoning.
8. Estimate the number of barrels of oil produced by Russia per day. Write your answer in exponential notation.
9. A barrel of oil contains 42 gallons of oil.
 - a. In 2008, the population of China was about 1.3 billion. Estimate the number of gallons of oil consumed by China per person per day.
 - b. In 2008, the population of the United States was about 304 million. Compare your estimate in part (a) with the number of gallons of oil consumed by the United States per person per day.
10. Use the formula below to estimate and compare the net exports for Russia and Japan. What does a negative value indicate?

$$\text{Net exports} = \text{oil produced} - \text{oil consumed}$$

11. **Iran** Use the information in the doughnut graph to estimate the total number of barrels of oil Japan imported from Iran in 2008. Looking at the pictograph above, why do you think that Japan is one of Iran's top importers?
12. **U.S. Sanctions** The United States does not import any oil from Iran because of economic sanctions against the Middle Eastern country. It is estimated that lifting the sanctions could save the United States \$76 billion per year. Suppose sanctions were lifted. Estimate how much the United States would save per day.



Destination of Oil Exports from Iran in 2008 (in thousands of barrels of oil per day)

