Lesson 6: Splish, Splash, I was Takin' a Bath – How Much? Worksheet
Answers

Section I. How many cans of pop?

1. If each glass of water is 8 ounces, how many ounces of water does the average person drink in a lifetime?

   219,000 glasses/lifetime X 8 ounces/glass = 1,752,000 ounces/lifetime

2. A can of pop contains 12 ounces of liquid (mostly water). Using your answer from question 1, and assuming that you only drink pop to get that amount of water, how many cans of pop does the average person drink in a lifetime?

   1,752,000 ounces/life ÷ 12 ounces/pop = 146,000 pops/lifetime

3. How many 6-packs of pop is this?

   146,000 pops/lifetime ÷ 6 pops/6-pack = 24,333.3 6-packs/lifetime

4. How many 12-packs of pop is this?

   24,333.3 6-packs/lifetime ÷ 2 6-packs/12-pack = 12,166.67 12-packs/lifetime

   146,000 pops/lifetime ÷ 12 pops/12-pack = 12,166.67 12-packs/lifetime

5. A case of pop contains 24 cans. How many cases of pop is this?

   12,165.65 12-packs/lifetime ÷ 2 12-packs/case = 6,083.3 cases/lifetime

   146,000 pops/lifetime ÷ 24 pops/case = 6,083.3 cases/lifetime

Section II. How many miles of pop?

1. If each glass of water is 8 ounces, how many ounces of water does the average person drink in a lifetime?

   219,000 glasses/lifetime X 8 ounces/glass = 1,752,000 ounces/lifetime

2. A can of pop contains 12 ounces of liquid (mostly water). How many cans of pop does the average person drink in a lifetime?

   1,752,000 ounces/lifetime ÷ 12 ounces/pop = 146,000 pops/lifetime

3. A 12-ounce can of pop is approximately 5 inches tall. How many "inches of pop" does the average person drink in a lifetime?

146,000 pops/lifetime X 5 inches/pop = 730,000 inches/lifetime

4. How many "feet of pop" is this?

730,000 inches/lifetime ÷ 12 inches/foot = 60,833.3 feet/lifetime

5. How many "miles of pop" is this? (Note: There are 5, 280 feet in one mile.)

60,833.3 feet/lifetime ÷ 5,280 feet/mile = 11.5 miles/lifetime

Section III. How many swimming pools of water?

1. If each glass of water is 8 ounces, how many ounces of water does the average person drink in a lifetime?

219,000 glasses/lifetime X 8 ounces/glass = 1,752,000 ounces/life

2. One gallon contains 128 ounces. How many gallons of water does the average person drink in a lifetime?

1,752,000 ounces/lifetime ÷ 128 ounces/gallon = 13,687.5 gallons/lifetime

3. An average sized swimming pool (40 ft. x 20 ft. x 5 ft.) has a volume of is 4,000 ft^3. If there are 7.48 gallons in 1 $ft.^3$, how many gallons of water will this swimming pool hold?

4,000 $ft.^3$/pool X 7.48 gallons/$ft.^3$ = 29,920 gallons/pool

4. How many "swimming pools" of water does the average person drink in a lifetime?

13,687.5 gallons/lifetime ÷ 29,920 gallons/pool = 0.46 pools/lifetime (about ½ a pool)

Adapted from: "How Many Cans of Soda Pop?" Ecology Earth's Natural Resources Activity Book, by Jean Hopkins, Susan Johnson and Charles William McLaughlin, New Jersey: Prentice Hall, Inc., 1993 (ISBN 0-13-987090-3).