grams

Math 1030 #3b

ft²

Units and Conversions

Solving Problems

meters

oC

EX 1: Use the units to help solve these problems.

a) What is the total cost of 1.2 cubic yards of soil if it sells for $24 per cubic yard?

b) Suppose you earn $8.50 per hour and work 24 eight-hour days in a month. How much do you earn in that month?

c) Each year over 250,000 Americans die of a sudden cardiac death. Assuming a population of 305 million, what is mortality rate in units of deaths per 100,000 people?

EX 2: Use conversions to answer these questions.
Assume 1 € (1 euro) = $1.30.

a) Bottled water costs 1.75 € per liter in Paris. What is that in dollars per quart? (1 qt = 0.946 liters.)

b) As you leave Paris, you convert 4500 euros to dollars. How many dollars do you receive?

EX 3: Amazon's Kindle 2 has a capacity of 1.4 gigabytes (1.4 billion bytes). Assume that one byte corresponds to one character and an average page consists of 2000 characters.

a) How many pages of text can a Kindle hold?

b) How many 500-page books can a kindle hold?