Book 3 Test ReviewII answer key

1. A jar of 1000 jellybeans was placed in the school's office, and a message next to it asked, "How many of these jelly beans are purple?"
   Sonya counted 18 beans in one area and noted that 3 of them were purple. She counted 10 in another area, and 2 were purple. In a third area, she counted 25 jellybeans and found 5 of them to be purple. Based on Sonya's data, estimate how many purple Jellybeans are in the jar.
   3/18 + 2/10 + 5/25 = 10/53
   10/53 = ?/1000 = approximately 189 purple beans
   Carla wanted to know how many were red. She counted 25 beans in which 6 were red. Next she counted a different area and out of 10, 3 of them were red. And in a third place she counted 15 beans in which 4 of them were red. How many red jellybeans would you estimate were in the jar.
   6/25 + 3/10 + 4/15 = 13/50
   13/50 = ?/1000 = approximately 260 red beans
2. While watching a hockey match Todd got very thirsty. The snack stand sold drinks in four sizes:

Sorta Swig: 20 ounces for $0.75 3.75 Swig: 32 ounces for $0.95 2.97
Big Swig: 44 ounces for $1.09 2.48 Super Swig: 64 ounces for $1.35 2.11

a. Which size would give Todd the most refreshment for his money? Explain how you made your decision.
The cost divided by quantities are the prices listed above for how much each ounce cost you in cents. Therefore the best deal is the Super Swig
b. If the snack offered an 84 ounce Mega Swig, how much should Todd expect to pay? Explain your thinking.
$1.35/64 oz = ?/84 oz
$1.77 but seeing the cost of the sodas always got cheaper as they bought, an acceptable answer would be between $1.45 and $1.77, with the best answer being about $1.65

State	1994 population	Land Area (Square Miles)
New York	8,169,000	47,224
New Mexico	1,654,000	21,364

3. Find the population densities of the two states.
173 people per square mile in NY
77.4 people per square mile in NM

4. How many people would have to move out of New York for it to have the same population density as New Mexico?

4,512,920
?/47,224 = 1,654,000/21,364
? = 3,656,080 This represents what the population of NY would need to be to be equal to NM so when you subtract that from 8,169,000 you get 4,512,920

5. How many people would have to move from New York to New Mexico for the two states to have the same population density?

1,405,698
First you need to put both laces together to average out their density so you get a total population of 9,823,000 and a total area of 68,588. Now set that ratio equal to NY using only its area.
?/47,224 = 9,823,000 / 68,588
? = 6,763,302 This represents what the population of NY would need to be to be equal to NM so when you subtract that from 8,169,000 you get 1,405,698 people would have to more from NY to NM.

6. Adam rode his bike to the library. The 2 mile distance took him about 15 minutes. Adam wondered what his speed was for his trip. Find Adam's speed in miles per hour.
2/15 = ?/60
8 mph