Dinosaur Data

Directions: Review the information about Sue the dinosaur. Then complete the following questions.

1. Many anthropologists believe that human beings as we know them today first appeared on Earth around 130,000 years ago. Dinosaurs evolved from other reptiles some time during the Triassic period, over 230 million years ago. About how many years passed between the appearance of the first dinosaurs and the appearance of modern human beings? ________________

2. Sue lived about 67 million years ago, near the end of the Mesozoic Era. About how many years after the first dinosaurs did Sue live? ________________

3. The regulation NFL football field is 120 yards long. Sue the dinosaur is 42 feet long. How many replicas of Sue could you fit from one end of a regulation-size football field to the other? Express your answer as a fraction. ________________

4. The Empire State Building in New York City is 1,250 feet tall from its base to the observatory on the 102nd floor. Sue was probably about 20 feet tall at the shoulders. If dinosaurs like Sue stood on each other’s shoulders, how many of them would it take to reach the top of the Empire State Building? Express your answer as a fraction. ________________

5. Sue’s skull weighs 600 pounds. Sue’s estimated live body weight is 7 tons. What percent of Sue’s body weight is her skull? Give your answer to the nearest tenth of a percent. ________________

6. The average weight of a human skull is about 2 pounds. How many times greater is the weight of Sue’s skull? ________________

7. The brain cavity of Sue’s skull is large enough to hold a quart of milk. The brain cavity size of an average human can hold about one-and-one-half quarts of milk. Which of the following statements most accurately describes the relationship between skull weight and brain size?
   a. Animals with heavy skulls have big brains.
   b. Animals with light skulls have small brains.
   c. Skull weight and brain size are not related.