Homework for CUIN 7333: Due April 13, 2010

1. What will happen to the fraction 7/8 if the top number gets smaller and the bottom number gets bigger?
    a. Fraction gets bigger
    b. Fraction gets smaller
    c. Fraction stays the same
    d. There is not enough information to tell

Please explain your choice:

2. What will happen to the fraction ¾ if the top number gets bigger and the bottom number gets bigger?
    a. Fraction gets bigger
    b. Fraction gets smaller
    c. Fraction stays the same
    d. There is not enough information to tell

Please explain your choice:

3. Place a number in the brackets that will make the two fractions equal:

$$\frac{8}{24} = \frac{[\ \ ]}{6}$$

Please explain why you wrote this number:

4. Circle the smaller fraction. If they are equal, circle both fractions:

$$\frac{3}{15} \qquad \frac{9}{45}$$

Please explain your thinking:

5. If Nick ran few laps in more time than he did yesterday, his running speed would be
   a. Faster
   b. Slower
   c. Exactly the same
   d. There is not enough information to tell

Please explain your thinking:

6. Nancy's movie line has more people in it than Kathy's line. Nancy's line is longer than Kathy's line. In which line are the people closer together?
   a. Nancy's line
   b. Kathy's line
   c. The people are spaced exactly the same
   d. There is not enough information to tell

Please explain your thinking:

7. Alex and Peter drew the same size maps of their classroom. Alex drew two desks 8 inches apart on his map that are really 24 feet apart in the classroom. How long on his map did Peter draw the 6-foot-long chalkboard?

Please explain the thinking that led to your answer:

8. Anne and Linda mixed some green paint for a project. Anne mixed 3 drops of green tint with 15 ounces of white paint. Linda mixed 9 drops of green tint with 45 ounces of white paint. Who mixed the darkest shade of green paint?
   a. Anne
   b. Linda
   c. Their paint mixtures were exactly the same shade
   d. There is not enough information to tell.

Please explain your thinking: