Angular Displacement

Solve the following problems

1. (Walker, p. 300, #1)The following angles are given in degrees. Convert them to radians:
   a. 30°

   b. 45°

   c. 90°

   d. 180°

2. (Walker, p. 300, #2)The following angles are given in radians. Convert them to degrees:
   a. $\pi/6$

   b. 0.70π

   c. 1.5π

   d. 5π

3. A person turns from facing east to facing 30° north of west. What is the person's angular displacement in radians?

4. What is the angular displacement of the hour hand of a clock it goes from 2:00 PM to 7:00 PM?

5. What is the angular displacement of the Sun at the solar equinox when the sun has gone ¾ of the way through the sky?

6. What is the angular displacement of the hour hand of the clock for the same time equivalent as problem 5?