1. Jill, Shyan, and Barb stood in the middle of the yard and faced the barn. Jill turned 90° to the right. Shyan turned 180° to the left. Barb turned 270° to the left. Name the object that each girl is now facing.

   Jill: House  
   Shyan: fence  
   Barb: House

2. Allison looked at the clock at the beginning of class and at the end of class. How many degrees did the minute hand turn from the beginning of class until the end?

   Beginning:  
   End:  

   360°

3. The snowboarder went off a jump and did a 180°. In which direction was the snowboarder facing when he landed? How do you know?

   Opposite direction; explanations vary

4. As she drove down the icy road, Mrs. Campbell slammed on her brakes. Her car did a 360°. Explain what happened to Mrs. Campbell’s car.

   Mrs. Campbell’s car made a full turn.
5. Jonah turned the knob of the stove two quarter-turns. Draw a picture showing the position of the knob after he turned it.

Before  

After

6. Betsy used her scissors to cut out a coupon from the newspaper. How many total quarter-turns will she need to rotate the paper in order to cut out the entire coupon?

SAVE $1.00

She will need to make 4 quarter turns.

7. How many quarter-turns does the picture need to be rotated in order for it to be upright?

The picture needs to rotate 2 quarter turns.

8. David faced north. He turned 180° to the right, and then 270° to the left. In which direction is he now facing?

He is now facing west.