Mirror Time

Pre-Activity

Hold a mirror on either the left or right side of each figure below. Which of the reflections which you see in the mirror are the same as the original figure? Which are different? Draw the reflection(s) which are different from the original.
Now look at the two clock faces below. Draw in the hands for the left clock so that it shows 8:00. Hold a mirror to the right of this clock, and draw the hands on to the right clock as you see them reflected in the mirror. Does your mirror clock say 12:20 or 4:00?
1. Adam was playing with the mirror images of a clock. He looked at the clock in his living room. It was showing 2:50. What time was the clock in his mirror showing?

Draw the positions of the hands of the real clock and its mirror reflection.

Write beneath the picture what time each of them shows.
2. Some time later Adam looked at the mirror. The clock in the mirror was showing 6.45. What was the real time?

Again, draw both pictures. Write beneath the picture what time each one shows.

3. What can you say about the directions in which the hands of the real clock and the clock in the mirror are moving?
4. After making a lot of experiments with the clock Adam discovered a position of the clock's hands for which the clock and its mirror image were showing exactly the same time. Here is a picture of this.

The Real Clock  
Mirror Reflection

On the clocks below, draw another position of the clock’s hands where the clock and its mirror image show exactly the same time.

The Real Clock  
Mirror Reflection