

Problem set 8
(Assigned on November 6)

The suitor from the previous homework passed both tests and happily claimed Portia II as his bride. They lived happily ever after and had a lovely child Portia III (we call her Portia again). When she grew up, she decided to choose her husband by the casket method as her mother and grandmother. The suitor had to pass three tests. She went back to her grandmother's idea of having only one statement on each casket, rather than two (we saw the tests last Sunday). But there was a new wrinkle. As she explained, each casket was fashioned by one of the famous Florentine craftsmen: Bellini or Cellini. Whenever Cellini fashioned a casket, he always put a false inscription on it, whereas Bellini put only true inscriptions on his caskets. The first test we discussed during our meeting.

1. The second test used only two caskets (gold and silver); one of them contained a portrait and the other one was empty (no dagger used). Again, each casket was fashioned by Bellini or Cellini. The caskets read

<p>GOLD THE PORTRAIT IS NOT IN HERE</p>
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<p>SILVER EXACTLY ONE OF THESE TWO CASKETS WAS FASHIONED BY BELLINI</p>
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Which casket should the suitor choose to find the portrait?

2. The last test involved three caskets fashioned by Bellini or Cellini. Portia again used a portrait that she placed in one of the caskets, the other two were empty. To pass the test the suitor had to find the portrait and tell the maker of each casket. The inscrip-

tions read

GOLD
THE PORTRAIT
IS IN HERE

SILVER
THE PORTRAIT
IS IN HERE

LEAD
AT LEAST TWO OF
THESE CASKETS WERE
FASHIONED BY CELLINI

3. What time will the clock read 17 hours after the time it shows 19 hours before 4:00?
4. Pretend you were born on March 2. In 2011, your birthday was on a Wednesday. On what day did your birthday fall in 2012?