## Quiz 2 Version A Model Solution

Thursday, July 20, 2017

The quiz has 2+10 questions to bubble in.

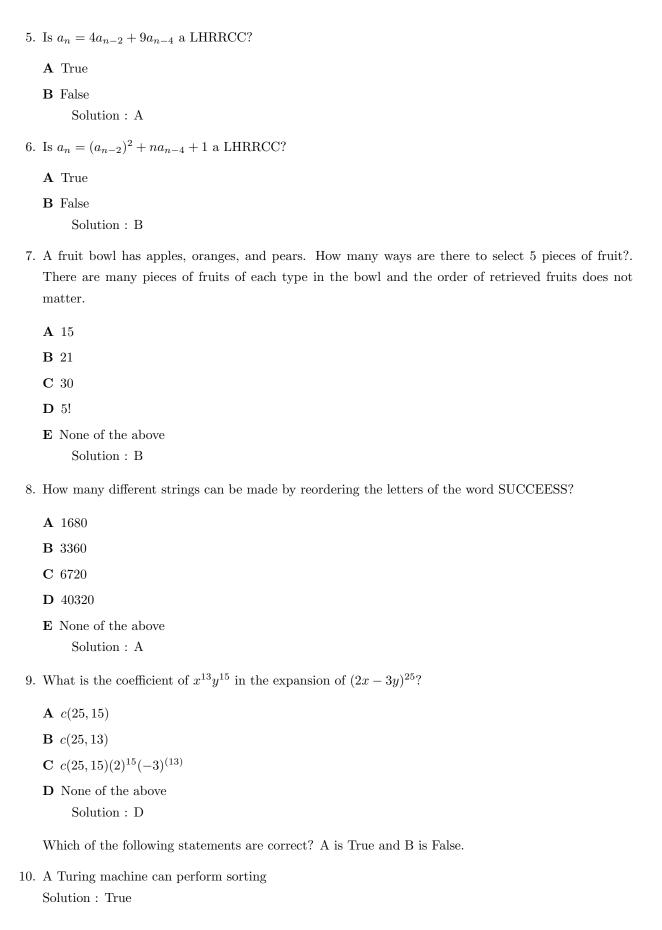
Keep the question sheet for your records.

- 1. I have spelled out and bubbled in correctly my first name, last name, and Purdue ID.
  - A True
  - B False
- 2. Your version of the quiz is Version A. Bubble in the version below. If you do not bubble in the version, your quiz score will be 0/10.
  - A Version A
  - ${f B}$  Version B
- 3. When rolling two dice and i represents the number from the first die and j represents the number from the second die, the variance of the random variable x(i,j) = i+j is:
  - **A** 1/6
  - **B** 5.83
  - C 2.92
  - **D** 3.5

Solution: B

- 4. The recurrence relation representing Towers of Hanoi is
  - **A**  $H_n = H_{n-1} + H_{n-2}$
  - **B**  $H_n = H_{n-1} + 1$
  - $\mathbf{C} \ H_n = nH_{n-1} + 1$
  - **D** None of the above

Solution: D



11. Among 100 people there are at least 20 who were born in the same month.

Solution: False

12. 5! is the number of permutations of 5 playing cards selected at random from a deck of 52 cards.

Solution: False