Algebra I EOC Practice #29

SPI 3102.5.5: Determine theoretical and/or experimental probability of an event and/or its complement including using relative frequency.

1. This table shows the number of students from each grade level who earned at least two A's during the first nine weeks grading period.

   Students with at least two A's

Grade Level	Number of Students
9	324
10	283
11	261
12	294

   One student will be randomly selected from this group of students to win the grand prize in the academic incentive program. Which is closest to the probability that the student selected will be a freshman or sophomore?

   A. O.24
   B. 0.28
   C. 0.48
   D. 0.52

2. Joe is playing a computer tic-tac-toe game. This table shows the results.

   Tic-Tac-Toe Results

Result	Frequency
Joe Wins	8
Computer Wins	7
Tie (Cat)	9

   What is the experimental probability that Joe will win?

   A. $\frac{7}{24}$

   B. $\frac{3}{8}$

   C. $\frac{1}{3}$

   D. $\frac{2}{3}$

3. Twenty-three colored slips of paper are placed in a box for a drawing. Anyone wearing a shirt that matches the slip drawn will be eligible for a prize. There are 9 blue slips, 7 red slips, 4 yellow slips, and 3 green slips.

   What is the probability that the first slip of paper drawn from the box is not red?

   A. $\frac{7}{23}$

   B. $\frac{16}{23}$

   C. $\frac{9}{23}$

   D. $\frac{14}{23}$

4. This table shows the number of cans of soup in Debbie's pantry.

   Soup in Debbie's Pantry

Flavor	Number of Cans
Potato	2
Vegetable	6
Chicken Noodle	8
Broccoli Cheese	4

   If Debbie randomly selects a can of soup to fix for lunch, what is the probability that the can selected will be vegetable or broccoli cheese?

   A. $\frac{1}{5}$

   B. $\frac{1}{10}$

   C. $\frac{1}{2}$

   C. $\frac{7}{10}$