2003 Q14

14. In this addition problem, each letter stands for a different digit.

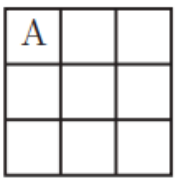
$$\begin{array}{cccc} & T & W & O \\ + & T & W & O \\ \hline F & O & U & R \end{array}$$

If $T = 7$ and the letter O represents an even number, what is the only possible value for W?

(A) 0 **(B)** 1 **(C)** 2 **(D)** 3 **(E)** 4

2008 Q14

14. Three As, three Bs and three Cs are placed in the nine spaces so that each row and column contain one of each letter. If A is placed in the upper left corner, how many arrangements are possible?



(A) 2 **(B)** 3 **(C)** 4 **(D)** 5 **(E)** 6

2001 Q14

14. Tyler has entered a buffet line in which he chooses one kind of meat, two different vegetables and one dessert. If the order of food items is not important, how many different meals might he choose?

Meat: beef, chicken, pork
Vegetables: baked beans, corn, potatoes, tomatoes
Dessert: brownies, chocolate cake, chocolate pudding, ice cream

(A) 4 (B) 24 (C) 72 (D) 80 (E) 144

4 / 6

2005 Q14

14. The Little Twelve Basketball Conference has two divisions, with six teams in each division. Each team plays each of the other teams in its own division twice and every team in the other division once. How many conference games are scheduled?

(A) 80 **(B)** 96 **(C)** 100 **(D)** 108 **(E)** 192

5 / 6

1985 Q15

15. How many whole numbers between 100 and 400 contain the digit 2 ?

A) 100 B) 120 C) 138 D) 140 E) 148

6 / 6

1999 Q15

15. Bicycle license plates in Flatville each contain three letters. The first is chosen from the set {C,H,L,P,R}, the second from {A,I,O}, and the third from {D,M,N,T}.

When Flatville needed more license plates, they added two new letters. The new letters may both be added to one set or one letter may be added to one set and one to another set. What is the largest possible number of ADDITIONAL license plates than can be made by adding two letters?

(A) 24 **(B)** 30 **(C)** 36 **(D)** 40 **(E)** 60