Name _____ Date _____

Probability Word Problems Games of Chance Lesson

Victor is waiting his turn to spin the prize wheel below. Each of the 6 sectors of the prize wheel are equal sizes. If Victor lands on the 6 (orange) he wins $1,000 dollars. If Victor lands on any other sector, he receives nothing.

If Victor has 2 chaces to spin the prize wheel, what is the probability that he will win the $1,000 prize?

Explanation: **Each time victor spins the wheel he has a 1 in 6 chance of winning. Since he has two chances to spin, the final probability would be the probability of getting it in one spin added to the product of probability of not getting it on the first roll and the probability of getting it on the second roll:**

$$\frac{1}{6} \quad + \quad \frac{1}{6} \qquad \left(\frac{5}{6}\right) \quad = \quad \frac{11}{36}$$

1st roll **2nd roll** **(not 1st roll)**

$$\frac{1}{6} \quad + \quad \frac{5}{36} \quad = \quad \frac{11}{36}$$