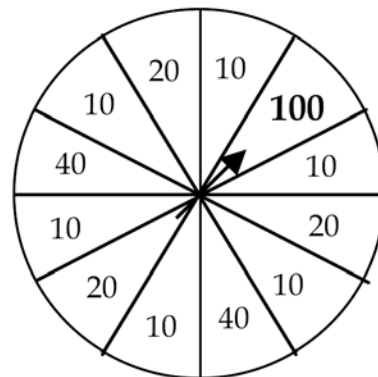


Place your answers on / in the spaces provided.

Wheel of Savings.

A sporting goods store announces a “Wheel of Savings” sale. Customers select the merchandise they want to purchase, then at each cash register they spin a wheel to determine the size of the discount they will receive. The wheel is divided into 12 regions, like a clock. Six of those regions are red and award a 10% discount. The three white regions award a 20% discount, and two blue regions award a 40% discount. The remaining region is gold, and a customer whose lucky spin lands there gets a 100% discount – the merchandise is free!



SHOW all your work for the following!!!

1. What is the probability that a customer gets at least a 40% discount? 1. _____
2. What is the probability that two customers in a row get only 10% discounts? 2. _____
3. What is the probability that three consecutive customers all get 20% discounts? 3. _____
4. What is the probability than none of the first four customers gets a discount over 20%? 4. _____
5. What is the probability that the first gold winner is the fifth customer in line? 5. _____
6. What is the probability that there is at least one gold winner among the first six customers? 6. _____
7. As you wait your turn in line, there are three gold winners in a row. A lively discussion ensues between the next two customers. One thinks that streak about kills her chances of winning free merchandise, as the wheel won't come up gold again for a very long time. The other says that the wheel is certainly on a hot streak, so they are lucky to be next in line. Comment on their opinions.