

Name _____

Date _____

Creating Probability Models - Independent Practice Worksheet

Complete all the problems.

1. Holden throws a birthday party for his friend Kevin. There are 20 birthday caps at the party, 9 of the caps are red. What is the probability that a randomly selected cap will be red?

2. Caleb has a heavy equipment rental agency. He specializes in skid steers. He has 35 vehicles available. 20 of the vehicles have air conditioning. If you randomly chose one of Caleb's vehicles what is the chance it would have air conditioning?



3. Jaycee has lots of cookies. There are three types of cookies (butter, chocolates, and nuts cookies). If the probability of getting a butter cookie is $\frac{6}{10}$ and the probability of getting a chocolate cookie is $\frac{2}{10}$, what is the probability of getting a nut cookie?

4. Victor and Jasper want to play cricket. They want to decide who bats first, so they flip a coin. Victor calls "heads". What is the probability he will win?

5. Zanier has a cap box. The box contains 7 blue caps, 5 green caps, and 8 pink caps. Without looking, if Zanier chooses a cap from the box, what is the probability of selecting a green cap?

6. A box contains 50 cups. It is a mix of plastic and paper cups. Simon chooses a cup out of the bag, without looking, records the cup type, and then places that cup back in the bag. Simon has recorded 24 plastic cups and 26 paper cups. Using these results, predict the number of plastic cups in the bag.

7. Jose has a basket. He has 30 candies, of which 15 are orange candy. What is the probability that a randomly selected candy will be an orange candy?

8. Dexter tosses a coin 30 times. This results in 12 heads and 18 tails. We define a heads as a success. What is the probability of heads?



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9. Emma has a box that contains balloons. There are 60 balloons in the box. 30 of the balloons are red. What is the probability that a randomly selected balloon will be red?

10. Reid has a bag that contains fruit. The bag contains 16 pineapples, 17 pomegranates, and 12 melons. What is the probability pulling pomegranate out of the bag?

