## Probability – Irene

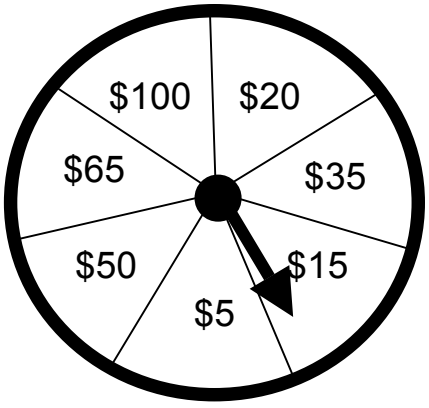
1. Irene has a box of taffy. The box contains the following flavors.
   4 raspberry chews
   3 chocolate chews
   5 cherry chews
   2 lemon chews

   If she reaches in and randomly takes out one piece of taffy, what is the **probability** she will pick a **chocolate** chew?
   ① ② ③ ④ ⑤
   (1) $^{14}/_{3}$
   (2) $^{3}/_{14}$
   (3) $^{5}/_{14}$
   (4) $^{6}/_{13}$
   (5) $^{1}/_{15}$

2. There are 140 cards in a bingo game. Louise has 4 cards. What is the **probability** that **Louise** will complete a row and win?
   ① ② ③ ④ ⑤
   (1) $^{2}/_{7}$
   (2) $^{1}/_{35}$
   (3) $^{35}/_{1}$
   (4) $^{3}/_{35}$
   (5) $^{3}/_{25}$

3. In Francisco's drawer are 6 white undershirts and 4 blue undershirts. Francisco reaches into his drawer and takes out an undershirt. Expressed as a **percent**, what is the **probability** that Francisco will take out a **blue** shirt?
   ① ② ③ ④ ⑤
   (1) 40%
   (2) 60%
   (3) 80%
   (4) 85%
   (5) 90%

Questions 4, 5, and 6 refer to the spinner below.




4. What is the **probability** that the spinner will stop on **$100**?
   ① ② ③ ④ ⑤
   (1) $^{1}/_{7}$
   (2) $^{7}/_{1}$
   (3) $^{1}/_{6}$
   (4) $^{1}/_{9}$
   (5) $^{1}/_{8}$

5. What is the **probability** that the spinner will stop on a dollar amount **less than $25**?
   ① ② ③ ④ ⑤
   (1) $^{4}/_{7}$
   (2) $^{3}/_{7}$
   (3) ¾
   (4) $^{6}/_{7}$
   (5) $^{5}/_{9}$

6. What is the **probability** that the spinner will stop on a dollar amount **greater than $25**?
   ① ② ③ ④ ⑤
   (1) $^{7}/_{4}$
   (2) $^{3}/_{7}$
   (3) $^{4}/_{7}$
   (4) $^{7}/_{3}$
   (5) $^{3}/_{11}$

Questions 7 and 8 refer to the following information.

Gracie has 4 nickels, 2 dimes, and 3 pennies in her pocket.

7. What is the **probability** that Gracie will pull out a **penny** the **first** time?
   ① ② ③ ④ ⑤
   (1) $^{1}/_{3}$
   (2) $^{3}/_{1}$
   (3) $^{3}/_{8}$
   (4) $^{9}/_{10}$
   (5) $^{1}/_{12}$

8. Gracie actually pulled out a dime the first time. What is the **probability** that Gracie will pull out a **dime** the **second** time?
   ① ② ③ ④ ⑤
   (1) $^{1}/_{8}$
   (2) ¼
   (3) $^{1}/_{9}$
   (4) $^{3}/_{11}$
   (5) $^{3}/_{14}$

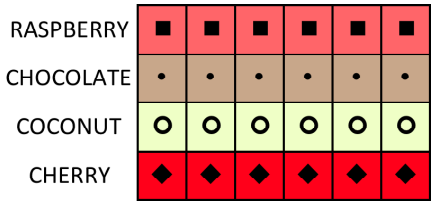
9. There are 3 white, 4 blue, 2 yellow, and 6 purple flowers. What is the **probability** that a hummingbird will land on a **white** flower?
   ① ② ③ ④ ⑤
   (1) $^{2}/_{15}$
   (2) $^{1}/_{5}$
   (3) $^{1}/_{3}$
   (4) $^{2}/_{5}$
   (5) $^{3}/_{5}$

10. Elena's shopping bag contains the following cans.

4 cans of green beans
3 cans of mixed vegetables
5 cans of corn

Expressed as a **percent**, what is the **probability** that Elena will choose a can of **mixed vegetables**?
① ② ③ ④ ⑤
(1) 20%
(2) 25%
(3) 33%
(4) 75%
(5) 90%

11. A box of candy contains 4 rows of candy.
There are 6 pieces of flavored candy in each row.




What is the **probability** of randomly selecting a **chocolate** piece of candy?
① ② ③ ④ ⑤
(1) $^4/_5$
(2) $^3/_5$
(3) ½
(4) $^2/_5$
(5) ¼

12. Juan has $1.50 in change in a jar. There are 15 nickels, 5 dimes, and 25 pennies. What is the **probability** of selecting a **dime**?
① ② ③ ④ ⑤
(1) $^1/_9$
(2) $^1/_3$
(3) ½
(4) $^5/_9$
(5) $^2/_3$

13. The queen of hearts, clubs, spades, and diamonds were placed face down.
What is the **probability** that the **queen of spades** will be picked?
① ② ③ ④ ⑤
(1) ½
(2) $^1/_3$
(3) ¼
(4) $^1/_5$
(5) $^1/_6$

14. In a candy machine there are 50 Snicker candy bars and 50 Pay Day candy bars. Expressed as a percent, what is the **probability** of getting a **Snicker** candy bar if you place a coin in the machine?
① ② ③ ④ ⑤
(1) 5%
(2) 15%
(3) 20%
(4) 25%
(5) 50%

15. A deck of playing cards has 52 cards.
What is the **probability** that the first card drawn will be an **ace**?
① ② ③ ④ ⑤
(1) $^1/_{13}$
(2) $^3/_{13}$
(3) $^4/_{13}$
(4) $^5/_{13}$
(5) $^6/_{13}$

16. There are 2 Cokes and 3 Ginger Ales in the refrigerator. What is the **probability** that Izzy will grab a **Ginger Ale**?
① ② ③ ④ ⑤
(1) $^2/_5$
(2) $^2/_7$
(3) $^5/_7$
(4) $^5/_9$
(5) $^5/_{11}$

---

Questions 17 and 18 refer to the following information.

The cook at the City Soup Kitchen has the following number of soup cans.

60 cans of tomato soup
48 cans of vegetable soup
36 cans of chicken soup

17. What is the **probability** that the **first** can the cook opens will be **tomato soup**?
① ② ③ ④ ⑤
(1) $^1/_{60}$
(2) ¼
(3) $^1/_3$
(4) $^5/_{12}$
(5) $^7/_{12}$

18. The cook actually opened three cans of tomato soup, three cans of vegetable soup, and six cans of chicken soup. What is the **probability** that the **next** can the cook opens will be **chicken soup**?
① ② ③ ④ ⑤
(1) $^1/_{30}$
(2) $^1/_6$
(3) $^5/_{22}$
(4) $^{17}/_{22}$
(5) $^5/_6$

19. Seven buses leave the Colfax Avenue Bus stop each hour. Only 2 of them go to Park Meadows. What is the **probability** that the buses will **not go** to Park Meadows.
① ② ③ ④ ⑤
(1) $^1/_7$
(2) $^3/_7$
(3) $^5/_7$
(4) $^6/_7$
(5) $^7/_9$

20. In a bag of twenty bananas, 3 are bruised. What is the **probability** of picking a banana that is **not bruised**?
① ② ③ ④ ⑤
(1) $^3/_{17}$
(2) $^{17}/_{20}$
(3) $^{17}/_{23}$
(4) $^3/_{19}$
(5) $^{17}/_3$

21. The Pueblo telephone book contains 7500 names. There are 15 Montoyas listed in the phone book. What is the **probability** that in a random selection of Pueblo telephone numbers, the first number will belong to a **Montoya**?
① ② ③ ④ ⑤
(1) $^1/_5$
(2) $^1/_{50}$
(3) $^1/_{500}$
(4) $^1/_{5000}$
(5) $^1/_{50000}$

Questions 22, 23, and 24 refer to the following information.

Elizabeth works as a cashier at Wal Mart. At the end of the day, she had 12 quarters, 20 dimes, 18 nickels, and 30 pennies. She put all the coins in a bag.

22. What is the **probability** that the **first coin** she takes from the bag will be a **dime**?
① ② ③ ④ ⑤
(1) ½
(2) $^1/_3$
(3) ¼
(4) $^1/_8$
(5) $^1/_9$

23. What is the **probability** that the **first** coin she takes from the bag will be a **penny**?
① ② ③ ④ ⑤
(1) $^3/_8$
(2) $^3/_{10}$
(3) $^3/_{14}$
(4) $^5/_{14}$
(5) $^5/_{18}$

24. What is the **probability** that the **first** coin she takes from the bag will be a **quarter or a nickel**?
① ② ③ ④ ⑤
(1) $^1/_8$
(2) $^3/_8$
(3) $^5/_8$
(4) $^5/_9$
(5) $^5/_{11}$

Questions 25 and 26 refer to the following information.

The following balls are stored at the Otero Junior College Fitness Center.

5 volleyballs
6 basketballs
3 tennis balls

25. What is the **probability** that the **first** ball Frank grabs from the locker will be a **tennis ball**?
① ② ③ ④ ⑤
(1) $^3/_{11}$
(2) $^3/_{13}$
(3) $^3/_{14}$
(4) $^3/_{16}$
(5) $^5/_{17}$

26. Frank actually took out 1 volleyball and 2 basketballs. What is the **probability** that the **next** ball will be another **volleyball**?
① ② ③ ④ ⑤
(1) $^1/_{11}$
(2) $^2/_{11}$
(3) $^4/_{11}$
(4) $^5/_9$
(5) $^5/_{19}$

27. Carlos received a shipment of shirts to sell in his store. The shipment contained these sizes.
10 small shirts
15 medium shirts
8 large shirts

What is the **probability** that the **first** shirt he takes from the box will be a **medium** size?
① ② ③ ④ ⑤
(1) $^3/_{11}$
(2) $^4/_{11}$
(3) $^5/_{11}$
(4) $^4/_7$
(5) $^1/_{12}$

Questions 28 and 29 refer to the following information.

Max is stacking cartons of cans on the supermarket shelves. Each carton contains 6 cans of peas and 10 cans of tomatoes.

28. What is the **probability** that the **first** can Max takes from a carton will be a can of **peas**?
① ② ③ ④ ⑤
(1) $^3/_5$
(2) $^3/_8$
(3) $^5/_8$
(4) $^3/_{23}$
(5) $^6/_{13}$

29. Max actually took out 1 can of peas and 1 can of tomatoes. What is the **probability** that the **next** can Max takes will be a can of **tomatoes**?
① ② ③ ④ ⑤
(1) $^1/_{13}$
(2) $^7/_{14}$
(3) $^9/_{14}$
(4) $^4/_9$
(5) $^5/_8$

30. There are three dimes, two nickels, and five quarters in a drawer. Esai picked up two quarters on his first two tries. What is the **probability** that Esai will pick a **dime** on the **next** try?
① ② ③ ④ ⑤
(1) ¼
(2) ¾
(3) $^3/_8$
(4) $^1/_2$
(5) $^1/_3$

Questions 31 and 32 refer to the following information.

Lucas Armendariz, his wife Alice, and their son Felipe each bought a ticket for a chance to win a plasma TV. Altogether 540 tickets were sold.

31. What is the **probability** that **Lucas** will win the plasma television?
① ② ③ ④ ⑤
(1) $^1/_{180}$
(2) $^1/_{540}$
(3) $^3/_{130}$
(4) $^5/_{12}$
(5) $^5/_{17}$

32. What is the **probability** that a member of the Armendariz family will win the plasma television?
① ② ③ ④ ⑤
(1) $^1/_{180}$
(2) $^1/_{540}$
(3) $^1/_{221}$
(4) $^1/_{250}$
(5) $^1/_{500}$

Questions 33 and 34 refer to the following information.

There are 100 marbles in a box.
50 are green.
25 are yellow.
The remainder are red.

33. What is the **probability** that the **first** marble Maria picks will be a **red** one?
① ② ③ ④ ⑤
(1) ¼
(2) $^1/_3$
(3) ½
(4) $^1/_{27}$
(5) $^1/_{70}$

34. Maria actually took 3 yellow marbles and 2 green marbles from the jar. What is the **probability** that the **next** marble she takes from the box will be **red**?
① ② ③ ④ ⑤
(1) $^5/_{94}$
(2) $^5/_{18}$
(3) $^5/_{19}$
(4) $^5/_{21}$
(5) $^5/_{24}$