PROBABILITY

A OUTCOME

A.1 LISTING ALL POSSIBLE OUTCOMES

MCQ 1: Look at this die:  . If you roll it, what are all the possible outcomes?

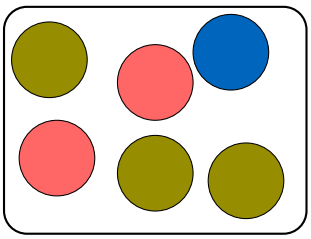
☐ 1, 2, 3, 4, 5

☐ 1, 2, 3, 4, 5, 6, 7

☐ 1, 2, 3, 4, 5, 6

MCQ 2: Imagine a bag with balls: 2 red, 1 blue, and 3 green. If you pick one ball without looking, what are all the possible colors you could get?

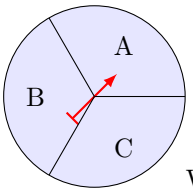
Bag



☐ Red, Blue, Green

☐ 2 Red, 1 Blue, 3 Green

☐ Red, Red, Blue, Green, Green, Green

MCQ 3: Look at this spinner: 

What are all the possible letters it could land on?

☐ A, B

☐ A, C

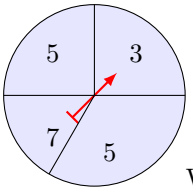
☐ A, B, C

MCQ 4: If you pick a letter from the word "PAPA," what are all the possible letters you could pick?

☐ P, A, P, A

☐ P, A, P

☐ P, A

MCQ 5: Look at this spinner: 

What are all the possible numbers it could land on?

☐ 3, 5, 7, 7

☐ 3, 5, 5, 7

☐ 3, 5, 7

MCQ 6: A couple is expecting a baby. They don't know if it will be a boy or a girl. What are all the possible outcomes for the baby's gender?

☐ Boy

☐ Girl, Boy

☐ Girl

MCQ 7: If you pick a letter from the word "APPLE," what are all the possible letters you could pick?

☐ P, A, L, E

☐ P, P, A, L, E

☐ A, P, L

☐ A, L, E, P, P

MCQ 8: If you pick a letter randomly from the word "BANANA," what are all the possible letters you could pick?

☐ B, N, A

☐ B, A, N, A, N, A

☐ A, B, N, A, B, N

B EVENT

B.1 IDENTIFYING OUTCOMES FOR DIE-ROLLING EVENTS

MCQ 9: If you roll a die, what are the outcomes for the event "getting a 3"?

☐ 1, 3, 5

☐ 2, 3, 4

☐ 1, 2, 3

☐ 3

MCQ 10: If you roll a die, what are the outcomes for the event "getting a 5 or 6"?

☐ 5, 6

☐ 4, 5, 6

☐ 1, 2, 3

☐ 3, 4, 5

MCQ 11: If you roll a die, what are the outcomes for the event "not getting a 6"?

☐ 2, 3, 4

☐ 1, 2, 3, 4, 5, 6

☐ 1, 2, 3, 4, 5

☐ 1, 3, 5

MCQ 12: If you roll a die, what are the outcomes for the event "getting a number greater than or equal to 4"?

☐ 1, 2, 3

☐ 4, 5, 6

☐ 3, 4, 5

☐ 2, 3, 4

MCQ 13: If you roll a die, what are the outcomes for the event "even number"?

☐ 1, 3, 5

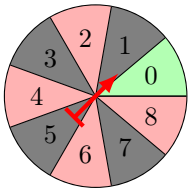
☐ 2, 4, 6

☐ 1, 2, 3, 4, 5, 6

☐ 2, 3, 4, 5

B.2 IDENTIFYING OUTCOMES IN A CASINO SPINNER

MCQ 14: If you spin the spinner below, what are the outcomes for the event "getting a 2"?



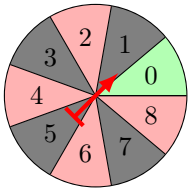
☐ 2

☐ 1, 2, 3

☐ 2, 4, 6

☐ 0, 1, 2

MCQ 15: If you spin the spinner below, what are the outcomes for the event "not getting a 4"?



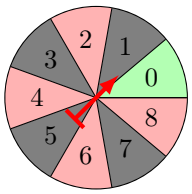
☐ 1, 2, 3, 4

☐ 0, 1, 2, 3, 5, 6, 7, 8

☐ 2, 4, 6, 8

☐ 4, 5, 6

MCQ 16: If you spin the spinner below, what are the outcomes for the event "red"?



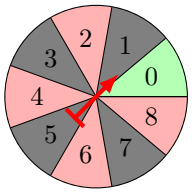
☐ 1, 3, 5, 7

☐ 0

☐ 2, 4, 6, 8

☐ 1, 2, 3, 4

MCQ 17: If you spin the spinner below, what are the outcomes for the event "getting an odd number"?



☐ 0, 1, 3

☐ 2, 4, 6, 8

☐ 1, 2, 3, 4

☐ 1, 3, 5, 7

C USING WORDS TO DESCRIBE PROBABILITY

C.1 FINDING THE PROBABILITY IN A DRAWING EXPERIMENT

MCQ 18: What is the chance of picking a red candy from a bag with 4 red candies and 4 blue candies?

Choose one answer:

☐ Impossible

☐ Less Likely

☐ Even Chance

☐ Most Likely

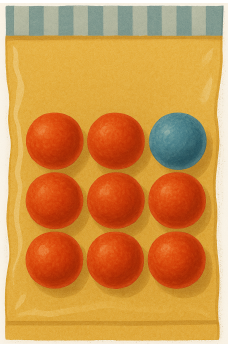
☐ Certain

MCQ 19: What is the chance of picking a blue candy from a bag with 4 red candies and 4 blue candies?

Choose one answer:

- ☐ Impossible
- ☐ Less Likely
- ☐ Even Chance
- ☐ Most Likely
- ☐ Certain

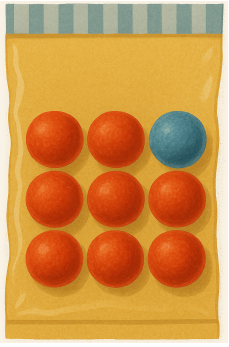
MCQ 20: What is the chance of picking a blue candy from a bag with 9 red candies and 1 blue candy?



Choose one answer:

- ☐ Impossible
- ☐ Less Likely
- ☐ Even Chance
- ☐ Most Likely
- ☐ Certain

MCQ 21: What is the chance of picking a red candy from a bag with 9 red candies and 1 blue candy?

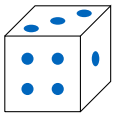


Choose one answer:

- ☐ Impossible
- ☐ Less Likely
- ☐ Even Chance
- ☐ Most Likely
- ☐ Certain

C.2 FINDING THE PROBABILITY IN A DICE EXPERIMENT

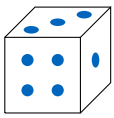
MCQ 22: What is the chance of getting a 3 when you roll a die?



Choose one answer:

- ☐ Impossible
- ☐ Less Likely
- ☐ Even Chance
- ☐ Most Likely
- ☐ Certain

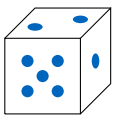
MCQ 23: What is the chance of **not** getting a 3 when you roll a die?



Choose one answer:

- ☐ Impossible
- ☐ Less Likely
- ☐ Even Chance
- ☐ Most Likely
- ☐ Certain

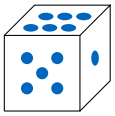
MCQ 24: What is the chance of getting an even number (2, 4, or 6) when you roll a die?



Choose one answer:

- ☐ Impossible
- ☐ Less Likely
- ☐ Even Chance
- ☐ Most Likely
- ☐ Certain

MCQ 25: What is the chance of getting a 7 when you roll a die?



Choose one answer:

- ☐ Impossible
- ☐ Less Likely
- ☐ Even Chance
- ☐ Most Likely
- ☐ Certain

D USING NUMBERS TO QUANTIFY PROBABILITY

D.1 DESCRIBING PROBABILITIES WITH WORDS

MCQ 26: The probability of winning a game is $\frac{1}{10}$. Find the word to describe this probability.

- ☐ Impossible
- ☐ Less Likely
- ☐ Even Chance
- ☐ Most Likely
- ☐ Certain

MCQ 27: The probability of winning a game is $\frac{4}{5}$. Find the word to describe this probability.

- ☐ Impossible
- ☐ Less Likely
- ☐ Even Chance
- ☐ Most Likely
- ☐ Certain

MCQ 28: The probability of winning a game is $\frac{1}{2}$. Find the word to describe this probability.

- ☐ Impossible
- ☐ Less Likely
- ☐ Even Chance
- ☐ Most Likely
- ☐ Certain

MCQ 29: The probability of winning a game is 0. Find the word to describe this probability.

- ☐ Impossible
- ☐ Less Likely
- ☐ Even Chance
- ☐ Most Likely
- ☐ Certain

MCQ 30: The probability of winning a game is 1. Find the word to describe this probability.

- ☐ Impossible
- ☐ Less Likely
- ☐ Even Chance
- ☐ Most Likely
- ☐ Certain

D.2 MAKING DECISIONS USING PROBABILITIES

MCQ 31: Louis advises you to play because the probability of winning this game is $\frac{3}{4}$. Do you follow his advice?

- ☐ Yes
- ☐ No

MCQ 32: Louis advises you to play because the probability of winning this game is $\frac{1}{4}$. Do you follow his advice?

- ☐ Yes
- ☐ No

MCQ 33: The probability of succeeding a penalty is $\frac{1}{2}$ for Louis and $\frac{3}{4}$ for Hugo. Which player do you choose to take the penalty?

- ☐ Louis
- ☐ Hugo

MCQ 34: The probability of succeeding a penalty is $\frac{1}{4}$ for Louis and $\frac{3}{5}$ for Hugo. Which player do you choose to take the penalty?

- ☐ Louis
- ☐ Hugo