

Year 7 Data 2 Worksheet



In the Questions 1 to 9 below, Probability of an Event is denoted by $P\{\text{Event}\}$.

1. $S = \{1, 2, 3, 4, 5, 6, 7, 9\}$.
 - A. What is $P\{3\}$?
 - B. What is $P\{\text{a number less than } 6\}$?
 - C. $P\{\text{even number}\}$?

2. $S = \{3, 4, 6, 7, 8, 9, 10, 12, 14, 15, 18\}$.
 - A. What is $P\{\text{at least } 10\}$?
 - B. What is $P\{\text{multiple of } 3\}$?

3. $S = \{1, 3, 7, 14, 15, 17, 18, 19, 20\}$.
 - A. What is $P\{\text{a number less than } 11\}$?
 - B. What is $P\{\text{odd number}\}$?

4. $S = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12\}$.
 - A. What is $P\{\text{a factor of } 12\}$?
 - B. What is $P\{\text{prime number}\}$?

5. $S = \{2, 5, 7, 8, 9, 11, 14\}$.
 - A. What is $P\{\text{a number greater than } 15\}$?
 - B. What is $P\{\text{composite number}\}$?

6. You pick a card at random.



What is $P(5)$? Simplify your answer and write it as a fraction or whole number.

$P(5) = \underline{\hspace{2cm}}$

7. A bag contains 15 marbles, of which 6 are white.

What is the probability that a randomly selected marble will be white?

Simplify your answer and write it as a fraction or whole number.

$P(\text{white}) =$

8. You pick a card at random.



What is $P(\text{BLACK})$?

- A. $1/5$
- B. $1/2$
- C. $1/3$
- D. 1

9. Gillian's Pie Shop has 18 pies for sale, including 6 blackberry pies.

What is the probability that a randomly selected pie will be a blackberry pie?

Simplify your answer and write it as a fraction or whole number.

$P(\text{blackberry pie}) =$

10. Look at this set of 8 numbers:

66 70 69 66 66 66 69 66

How would the mode change if the number 66 were added to the set?

- A. increase
- B. decrease
- C. no change

11. Look at this set of 6 numbers:

8	8	1	8	2	4
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How would the median change if the number 2 replaced one of the 8's in the set?

- A. increase
- B. decrease
- C. no change

12. Look at this set of 8 numbers:

9	7	5	9	9	2	9	2
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How would the range change if the number 2 replaced one of the 9's in the set?

- A. increase
- B. decrease
- C. no change