Year 8 Probability – Mixed Practice

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Year 8 · Maths · Probability · Mixed practice · 30 questions

Name _____ **Date** _____

A. Mixed practice (mixed order)

1. The probability that a bus is late is 68%. What is the probability that the bus is not late?

Answer _____

2. A fair coin is flipped and a fair eight-sided dice is rolled. What is the probability of getting heads or a one? Give your answer as a fraction in its simplest form.

Answer _____

3. The probability that a team wins its next match is 3/10. What is the probability that the team does not win?

Answer _____

4. A fair coin is flipped and a fair twelve-sided dice is rolled. What is the probability of getting heads and a number less than three? Give your answer as a fraction in its simplest form.

Answer _____

5. The probability that a team wins its next match is 65%. What is the probability that the team does not win?

Answer _____

6. Two fair six-sided dice are rolled. Use a sample space diagram to find the probability that the total is 5. Give your answer as a fraction in its simplest form.

Answer _____

7. The probability that a bus is late is 30%. What is the probability that the bus is not late?

Answer _____

8. A fair spinner with 4 equal sections numbered 1 to 4 is spun and a fair 5-sided dice is rolled. How many possible outcomes are there?

Answer _____

9. The probability that a team wins its next match is 3/8. What is the probability that the team does not win?

Answer _____

10. A coin is flipped 100 times and lands on heads 54 times. Compare the experimental probability of heads with the theoretical probability.

Answer _____

11. The probability that a seed grows is 0.65. What is the probability that the seed does not grow?

Answer _____

12. Two fair six-sided dice are rolled. Use a sample space diagram to find the probability that the total is more than 7. Give your answer as a fraction in its simplest form.

Answer _____

13. The probability that a bus is late is 0.68. What is the probability that the bus is not late?

Answer _____

14. A fair coin is flipped and a fair ten-sided dice is rolled. What is the probability of getting tails and a number greater than two? Give your answer as a fraction in its simplest form.

Answer _____

15. The probability that it rains tomorrow is 35%. What is the probability that it does not rain?

Answer _____

16. A coin is flipped and a fair 6-sided dice (1 to 6) is rolled. List all the possible outcomes, using H for heads and T for tails.

Answer _____

17. The probability that a bus is late is 17/25. What is the probability that the bus is not late?

Answer _____

18. A dice is rolled 300 times and lands on 6 58 times. Find the experimental probability of a 6. How many 6s would you expect from a fair dice? Is the dice likely to be biased?

Answer _____

19. The probability that a seed grows is 40%. What is the probability that the seed does not grow?

Answer _____

20. Two fair six-sided dice are rolled. Use a sample space diagram to find the probability that the total is more than 8. Give your answer as a fraction in its simplest form.

Answer _____

21. A fair coin is flipped and a fair eight-sided dice is rolled. What is the probability of getting heads and a number less than three? Give your answer as a fraction in its simplest form.

Answer _____

22. The probability that a bus is late is 13/20. What is the probability that the bus is not late?

Answer _____

23. The probability that a train is late is 0.45. Bella says the probability that it is not late is 0.65. Explain the mistake and find the correct probability.

Answer _____

24. A fair spinner has 4 equal sections, 2 of them red. It is spun 200 times and lands on red 99 times. Find the experimental and theoretical probabilities of red, and the expected number of reds.

Answer _____

25. Two fair six-sided dice are rolled. Use a sample space diagram to find the probability that the total is 9. Give your answer as a fraction in its simplest form.

Answer _____

26. The probability that a train is late is 0.05. Amir says the probability that it is not late is 1.05. Explain the mistake and find the correct probability.

Answer _____

27. A fair spinner with 6 equal sections numbered 1 to 6 is spun and a fair 6-sided dice is rolled. How many possible outcomes are there?

Answer _____

28. A fair coin is flipped and a fair six-sided dice is rolled. What is the probability of getting heads or a one? Give your answer as a fraction in its simplest form.

Answer _____

29. Amir says any two events have probabilities that add up to 1. Is Amir right? Explain.

Answer _____

30. The probability that a seed grows is 4/9. What is the probability that the seed does not grow?

Answer _____