Grade 8 Probability Worksheet

Name: _____ Date: _____ Score: _____

Find the probability. Write your answer as a fraction on the line.

1. Equal chance of winning: 1, 4, 1, 9, 10, 3 points. What is the expected value? (round to 1 decimal)

_____

2. Equal chance of winning: 2, 7, 7, 3 points. What is the expected value? (round to 1 decimal)

_____

3. Probability of success is 3/18. In 40 trials, how many successes do you expect?

_____

4. Equal chance of winning: 8, 5, 1 points. What is the expected value? (round to 1 decimal)

_____

5. Equal chance of winning: 7, 1, 6, 5, 6, 8 points. What is the expected value? (round to 1 decimal)

_____

6. Equal chance of winning: 10, 1, 7, 1 points. What is the expected value? (round to 1 decimal)

_____

7. Equal chance of winning: 1, 8, 3, 2, 10, 6 points. What is the expected value? (round to 1 decimal)

_____

8. Probability of success is 5/10. In 75 trials, how many successes do you expect?

_____

9. Equal chance of winning: 3, 10, 6, 3 points. What is the expected value? (round to 1 decimal)

_____

10. Probability of success is 10/20. In 49 trials, how many successes do you expect?

_____

11. Equal chance of winning: 3, 10, 9 points. What is the expected value? (round to 1 decimal)

_____

12. Equal chance of winning: 1, 10, 9 points. What is the expected value? (round to 1 decimal)

_____

13. Probability of success is 16/18. In 36 trials, how many successes do you expect?

_____

14. Probability of success is 4/10. In 22 trials, how many successes do you expect?

_____

15. Equal chance of winning: 7, 2, 9, 2, 3 points. What is the expected value? (round to 1 decimal)

_____

16. Equal chance of winning: 9, 6, 8, 2, 2 points. What is the expected value? (round to 1 decimal)

_____

17. Equal chance of winning: 8, 10, 3, 1, 1 points. What is the expected

18. Equal chance of winning: 7, 4, 4, 2 points. What is the expected

19. Probability of success is 8/18. In 86 trials, how many successes do you expect?

20. Equal chance of winning: 8, 2, 8, 5 points. What is the expected

value? (round to 1 decimal)

_____

value? (round to 1 decimal)

_____

_____

value? (round to 1 decimal)

_____

21. Probability of success is 5/8. In 36 trials, how many successes do you expect?

_____

22. Probability of success is 14/16. In 43 trials, how many successes do you expect?

_____

23. Equal chance of winning: 6, 4, 7, 4, 3 points. What is the expected value? (round to 1 decimal)

_____

24. Equal chance of winning: 5, 6, 7, 10 points. What is the expected value? (round to 1 decimal)

_____

25. Equal chance of winning: 8, 7, 5, 9, 3, 3 points. What is the expected value? (round to 1 decimal)

_____

26. Probability of success is 10/13. In 20 trials, how many successes do you expect?

_____

27. Equal chance of winning: 8, 8, 4 points. What is the expected value? (round to 1 decimal)

_____

28. Probability of success is 4/18. In 46 trials, how many successes do you expect?

_____

29. Probability of success is 10/15. In 66 trials, how many successes do you expect?

_____

30. Equal chance of winning: 4, 6, 7, 1, 6, 3 points. What is the expected value? (round to 1 decimal)

_____

31. Probability of success is 10/14. In 85 trials, how many successes do you expect?

_____

32. Probability of success is 5/16. In 26 trials, how many successes do you expect?

_____

33. Probability of success is 14/20. In 79 trials, how many successes do you expect?

_____

34. Probability of success is 6/12. In 45 trials, how many successes do you expect?

_____

35. Probability of success is 6/15. In 10 trials, how many successes do you expect?

_____

36. Equal chance of winning: 3, 6, 2, 6 points. What is the expected value? (round to 1 decimal)

_____

37. Probability of success is 8/16. In 82 trials, how many successes do you expect?

_____

38. Probability of success is 9/16. In 72 trials, how many successes do you expect?

_____

39. Equal chance of winning: 5, 1, 2, 2, 8, 5 points. What is the expected value? (round to 1 decimal)

_____

40. Probability of success is 9/13. In 46 trials, how many successes do you expect?

_____

ANSWER KEY

Grade 8 Probability Worksheet

1. Equal chance of winning: 1, 4, 1, 9, 10, 3 points. What is the expected value? (round to 1 decimal)
   4.7

2. Equal chance of winning: 2, 7, 7, 3 points. What is the expected value? (round to 1 decimal)
   4.8

3. Probability of success is 3/18. In 40 trials, how many successes do you expect?
   7

4. Equal chance of winning: 8, 5, 1 points. What is the expected value? (round to 1 decimal)
   4.7

5. Equal chance of winning: 7, 1, 6, 5, 6, 8 points. What is the expected value? (round to 1 decimal)
   5.5

6. Equal chance of winning: 10, 1, 7, 1 points. What is the expected value? (round to 1 decimal)
   4.8

7. Equal chance of winning: 1, 8, 3, 2, 10, 6 points. What is the expected value? (round to 1 decimal)
   5

8. Probability of success is 5/10. In 75 trials, how many successes do you expect?
   38

9. Equal chance of winning: 3, 10, 6, 3 points. What is the expected value? (round to 1 decimal)
   5.5

10. Probability of success is 10/20. In 49 trials, how many successes do you expect?
    25

11. Equal chance of winning: 3, 10, 9 points. What is the expected value? (round to 1 decimal)
    7.3

12. Equal chance of winning: 1, 10, 9 points. What is the expected value? (round to 1 decimal)
    6.7

13. Probability of success is 16/18. In 36 trials, how many successes do you expect?
    32

14. Probability of success is 4/10. In 22 trials, how many successes do you expect?
    9

15. Equal chance of winning: 7, 2, 9, 2, 3 points. What is the expected value? (round to 1 decimal)
    4.6

16. Equal chance of winning: 9, 6, 8, 2, 2 points. What is the expected value? (round to 1 decimal)
    5.4

17. Equal chance of winning: 8, 10, 3, 1, 1 points. What is the expected value? (round to 1 decimal)

18. Equal chance of winning: 7, 4, 4, 2 points. What is the expected value? (round to 1 decimal)

19. Probability of success is 8/18. In 86 trials, how many successes do you expect?
    38

20. Equal chance of winning: 8, 2, 8, 5 points. What is the expected value? (round to 1 decimal)

4.6

21. Probability of success is 5/8. In 36 trials, how many successes do you expect?
23

25. Equal chance of winning: 8, 7, 5, 9, 3, 3 points. What is the expected value? (round to 1 decimal)
5.8

29. Probability of success is 10/15. In 66 trials, how many successes do you expect?
44

33. Probability of success is 14/20. In 79 trials, how many successes do you expect?
55

37. Probability of success is 8/16. In 82 trials, how many successes do you expect?
41

4.3

22. Probability of success is 14/16. In 43 trials, how many successes do you expect?
38

26. Probability of success is 10/13. In 20 trials, how many successes do you expect?
15

30. Equal chance of winning: 4, 6, 7, 1, 6, 3 points. What is the expected value? (round to 1 decimal)
4.5

34. Probability of success is 6/12. In 45 trials, how many successes do you expect?
23

38. Probability of success is 9/16. In 72 trials, how many successes do you expect?
41

5.8

23. Equal chance of winning: 6, 4, 7, 4, 3 points. What is the expected value? (round to 1 decimal)
4.8

27. Equal chance of winning: 8, 8, 4 points. What is the expected value? (round to 1 decimal)
6.7

31. Probability of success is 10/14. In 85 trials, how many successes do you expect?
61

35. Probability of success is 6/15. In 10 trials, how many successes do you expect?
4

39. Equal chance of winning: 5, 1, 2, 2, 8, 5 points. What is the expected value? (round to 1 decimal)
3.8

24. Equal chance of winning: 5, 6, 7, 10 points. What is the expected value? (round to 1 decimal)
7

28. Probability of success is 4/18. In 46 trials, how many successes do you expect?
10

32. Probability of success is 5/16. In 26 trials, how many successes do you expect?
8

36. Equal chance of winning: 3, 6, 2, 6 points. What is the expected value? (round to 1 decimal)
4.3

40. Probability of success is 9/13. In 46 trials, how many successes do you expect?
32