



Statistics & Probability

Name: _____

Grade: 7 _____

Date: _____

Find mean, median, mode, range, interpret data displays, and solve probability problems. Analyze errors and tackle challenges.

Part 1 · Mean, Median, Mode, Range CENTER

1. Data: 7, 9, 12, 15, 17. Mean = _____

2. Median = _____

3. Mode = _____

4. Range = _____

5. Add 9 to set above. New mode = _____

6. Add 20 to set above. New range = _____

Part 2 · Data Displays DISPLAYS

7. Dot plot: 2,2,3,4,4,4,5. Mode = _____

8. Median = _____

9. Range = _____

10. Box plot: min 3, Q1 5, median 7, Q3 9, max 12. Range = _____

11. IQR = _____

12. Distribution shape: 2,3,4,5,6,7,8,9,10 (describe) _____

Part 3 · Probability Basics

PROB

13. Probability of heads in fair coin?

14. Probability of rolling a 3 on a standard die?

15. Probability of picking red from bag with 3 red, 2 blue?

16. Probability of picking blue from bag above?

17. Probability of picking green from bag above?

18. Probability of rolling even number on die?

Part 4 · Compound Events

COMPOUND

19. Probability of heads then tails in 2 coin flips?

(20. Probability of rolling 2 then 5 on two dice?

(21. Probability of picking red then blue from bag above?

(22. Probability of picking two reds in a row (no replacement)?

(23. Probability of rolling odd then even on die?

(24. Reflection: Most helpful strategy? _____

Part 5 · Error Analysis ERROR

(25. Error: Mean of 7,9,12,15,17 is 17. Correct & mistake?

(26. Error: Range of 2,3,4,5,6 is 4. Correct & why?

(27. Error: Mode of 2,2,3,4,4,4,5 is 2. Correct & why?

Part 6 · Challenge & Reflection CHALLENGE

(28. Data: 5,7,9,11,13. Add one number to make mean 10. Number = _____

(29. Probability of rolling 2,3,4 in order on three dice?

(30. Probability of picking red, blue, red from bag above?



31. Reflection: Most helpful strategy? _____

Answer Key

1. 12
2. 12
3. none
4. 10
5. 9
6. 20
7. 4
8. 4
9. 3
10. 9
11. 4
12. Symmetric
13. $1/2$
14. $1/6$
15. $3/5$
16. $2/5$
17. 0
18. $1/2$
19. $1/4$
20. $1/36$
21. $3/10$
22. $1/10$
23. $1/4$
24. Varies
25. 12 / averaged not picked largest
26. 4 / max-min not count
27. 4 / most frequent not smallest
28. 15
29. $1/216$
30. $6/100$
31. Varies

Accept equivalent forms. Reflection varies.