School786
AN ONLINE SCHOOL

Name: Due Date: Teacher: Parent Sign:

2. Graph y ? -2 on a number line.

3. Graph t ? 0 on a number line.

4. Graph m < -4 on a number line.

5. Graph p ? 5 on a number line.

6. Graph z > -1 on a number line.

7. Graph a < 2 on a number line.

8. Graph b ? -3 on a number line.

9. Graph w ? $\frac{1}{2}$ on a number line.

10. Graph k > -5 on a number line.

Testing solutions to inequalities (11-20)

For each inequality, mark which given numbers are solutions (True/False):

11. Is x = 4 a solution to x > 3? (Test 2, 3, 4, 5)

12. Which of these satisfy n ? -2? (Test -3, -2, -1, 0)

13. Which of these satisfy t ? 0? (Test -1, 0, 1)

14. Which of these satisfy m < -4? (Test -5, -4, -3)

15. Which of these satisfy p ? 5? (Test 5, 6, 0)

16. Which of the numbers satisfy z > -1? (Test -2, -1, 0, 2)

17. Which of the following satisfy a < 2? (Test 1, 2, 3, 0)

18. For b ? -3, which numbers work? (Test -4, -3, -2)

19. For w ? $\frac{1}{2}$, which numbers are solutions? (Test $\frac{1}{2}$, 1, 0)

20. For k > -5, which numbers are solutions? (Test -6, -5, -4, 0)

One-step inequalities – solve (21-35)

21. Solve x + 7 > 12.

22. Solve n - 5 ? 10.

23. Solve 6a < 24.

24. Solve 4y ? 20.

25. Solve t/3 > 4.

26. Solve m/5 ? 6.

27. Solve -3p > 9.

28. Solve -8q ? 24.

29. Solve $(\frac{1}{4})$r ? 3.

30. Solve $(-\frac{1}{2})$s < 6.

31. Solve x - 9 ? -2.

32. Solve y + 15 < 20.

33. Solve 7b ? 35.

34. Solve -2c < 10.

35. Solve $(\frac{3}{2})$d > 9.

One-step inequalities focused on -5c ? 15 (36-40)

36. Solve -5c ? 15.

37. If -5c ? 15, is c = -3 a solution? c = -2? c = 0? (Test all three)

38. Graph the solution of -5c ? 15 on a number line.

39. Solve for c if -5c ? 0.

40. Solve -5c < 20.

One-step inequality word problems (41-50)

41. Maya has $50. She wants to buy T-shirts that cost $8 each. She can spend at most $50. Let t be the number of T-shirts. Write an inequality and find the greatest whole number of shirts she may buy.

42. A ferry can carry at most 120 people. If p people board and there are already 45 passengers, write an inequality for p and find the largest p allowed.

43. A farmer has at least 100 kg of feed. Each bag weighs 25 kg. Let b be the number of bags he can give away and still have at least 100 kg left. Write and solve an inequality for b (assume he starts with 100 kg).

44. A store is selling notebooks for $2 each. Alex has more than $10. Write an inequality for n notebooks he can buy and find a possible number of notebooks Alex could afford.

45. The temperature must be above -5 degrees for plants to survive. Write an inequality for temperature T and state whether T = -3 is okay.

46. A phone company charges $15 monthly and then $0.10 per text. If someone's budget is less than $25 for the month, write an inequality for the number of texts t they can send and find the maximum whole number of texts.

47. A recipe calls for less than 3 cups of sugar. If one cup measure is 1 and you used x cups, write an inequality and determine whether x = 2.5 is allowed.

48. John lost 4 pounds each week for w weeks. After w weeks he has lost more than 12 pounds. Write an inequality and find the smallest whole number of weeks w that satisfies this.

49. A parking lot charges $2 per hour. If you have at most $9 to spend, what inequality models the number h of hours you can park? How many whole hours can you park?

50. A charity needs at least $200. Each donation is $25. Let d be the number of donations; write and solve the inequality to find the smallest whole number of donations needed.