

Study Guide Test 4 - Inequalities

Draw a graph for each inequality.

1) $m < -1$

2) $x \geq -4$

3) $m < 3$

4) $x \leq -4$

5) $x < 6$

Solve each one step inequality and graph its solution.

6) $-8 - b > -5$

7) $-20v \leq 140$

8) $-380 \geq -19x$

9) $20 \leq \frac{n}{11}$

10) $\frac{a}{9} \geq -2$

11) $\frac{k}{3} \leq 15$

12) $-3 \leq p + 17$

13) $x + 5 \leq 13$

14) $-11 > -15 - n$

15) $m - 5 > -13$

Solve each two step inequality and graph its solution.

16) $5 + 8r \geq -51$

17) $-14 < -9 - 5n$

18) $-8 < \frac{x}{4} - 10$

19) $8 + 5b < -92$

20) $-6r - 10 < -70$

21) $5 \leq \frac{2 + n}{4}$

22) $-3 \leq \frac{x + 5}{2}$

23) $\frac{-9 + a}{6} > -2$

24) $\frac{10 + v}{5} > -2$

25) $-8 + \frac{x}{3} \geq -6$

Solve each multistep inequality and graph its solution.

26) $-(6x + 7) \leq -1$

27) $-7(-3 - 7k) \leq 21$

28) $-4(8 - 8n) < 64$

29) $-32 < 6(-3p - 6) + 4$

30) $-4(x - 3) \leq 0$

31) $40 > -3(n - 4) + 4$

32) $28 \geq -4(-4m - 1) + 8m$

33) $28 < -7(-4 + 8r)$

34) $7(1 - 7x) \leq 7$

35) $56 \leq 4(4n - 6)$

36) $-4v - 3 > -3(v + 3)$

37) $2 + 4b \geq -2b - 8(3b - 4)$

38) $-13 + 2x > -(1 + 2x)$

39) $-3(5a - 4) > -6 + 3a$

40) $5(1 + 2n) + 8n > 3n - 10$

41) $5k - 7(2k + 3) \geq -7k - 37$

42) $7(5p + 4) \geq 5p - 32$

43) $-3 - 5(-8 - 2n) > 37 + 7n$

44) $-28 + 7x > 6(1 + 3x) + 6x$

45) $-3(m - 8) > -6 + 2m$

Write each as an algebraic expression.

46) the quotient of p and 3 is greater than 46

47) the sum of n and 5 is greater than 46

48) the sum of d and 7 is less than 11

49) the product of z and 5 is greater than or equal to 20

50) the quotient of n and 6 is less than or equal to 38

51) n decreased by 22 is greater than 45

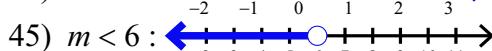
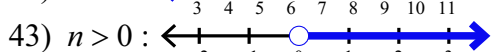
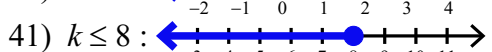
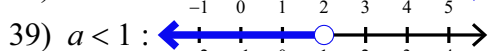
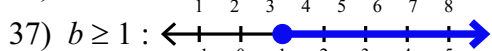
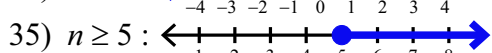
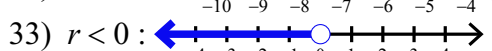
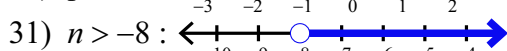
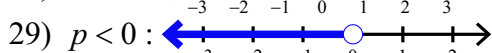
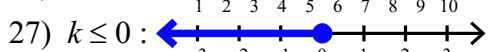
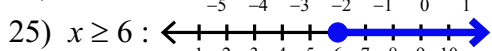
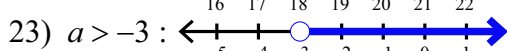
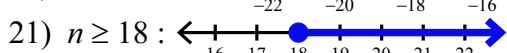
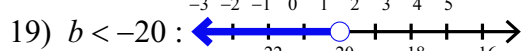
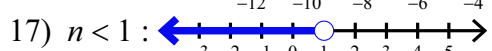
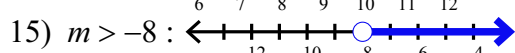
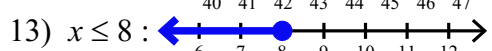
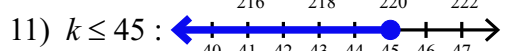
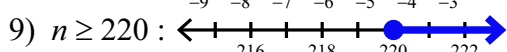
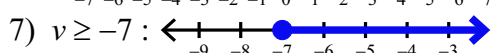
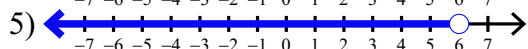
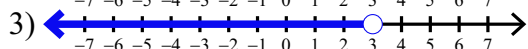
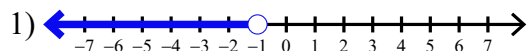
52) the product of v and 7 is less than 25

53) the sum of n and 10 is greater than 30

54) the sum of c and 8 is less than 23

55) p squared is less than 27

Answers to Study Guide Test 4 - Inequalities

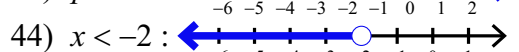
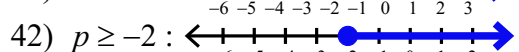
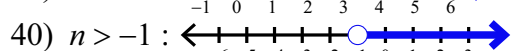
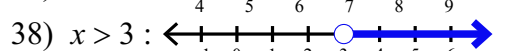
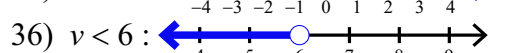
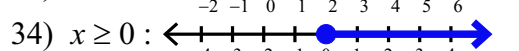
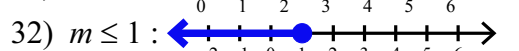
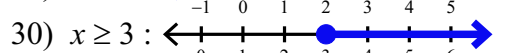
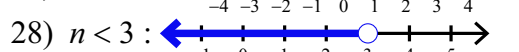
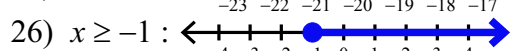
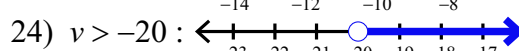
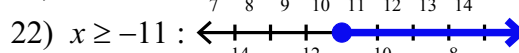
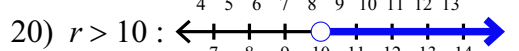
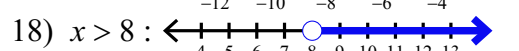
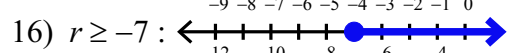
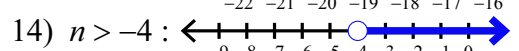
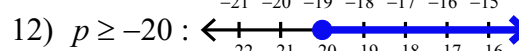
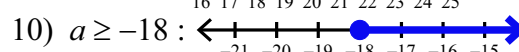
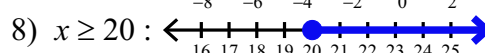
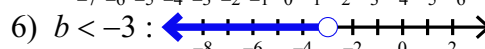
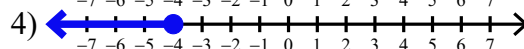
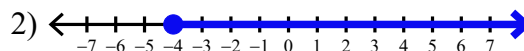


48) $d + 7 < 11$

49) $z \cdot 5 \geq 20$

52) $v \cdot 7 < 25$

53) $n + 10 > 30$



46) $\frac{p}{3} > 46$

47) $n + 5 > 46$

50) $\frac{n}{6} \leq 38$

51) $n - 22 > 45$

54) $c + 8 < 23$

55) $p^2 < 27$