

Solve each equation or inequality. Except for the empty set, express the solution set in interval notation:

Random Seed: 835221

- |                          |                              |                                |
|--------------------------|------------------------------|--------------------------------|
| 1. $ -15x + 16  = 1$     | 21. $ 19x - 8  =  -8x + 16 $ | 41. $9 -2x - 2  + 2 \leq 11$   |
| 2. $ -17x + 11  = -9$    | 22. $ x - 8  =  7x + 11 $    | 42. $5 -4x + 7  + 6 \geq 16$   |
| 3. $ -9x - 3  = 7$       | 23. $ x + 7  =  9x - 3 $     | 43. $7 9x - 3  + 6 \leq 13$    |
| 4. $ 18x + 8  = -8$      | 24. $ 2x - 11  =  3x + 8 $   | 44. $3 3x - 1  + 5 < 11$       |
| 5. $ 10x + 15  = 4$      | 25. $ 5x - 11  =  2x + 15 $  | 45. $11 10x - 8  + 5 \geq 16$  |
| 6. $ -10x - 6  = 4$      | 26. $ 9x - 1  =  2x - 6 $    | 46. $22 -9x + 4  + 3 < -19$    |
| 7. $ -2x + 19  = 9$      | 27. $ 8x - 11  =  7x + 19 $  | 47. $13 -10x - 6  + 5 > 18$    |
| 8. $ 8x - 1  = 9$        | 28. $ 3x - 4  =  4x - 1 $    | 48. $23 -4x + 1  + 7 \geq -16$ |
| 9. $ -4x + 2  = 8$       | 29. $ 4x - 6  =  8x + 2 $    | 49. $2 5x - 3  + 5 \leq 19$    |
| 10. $ -19x - 18  = 2$    | 30. $ 2x + 4  =  9x - 18 $   | 50. $17 -7x + 3  + 2 \geq 19$  |
| 11. $ 2x + 9  + -8 = 19$ | 31. $ -7x + 1  > 1$          | 51. $ \frac{-6x-2}{5}  \geq 1$ |
| 12. $ 9x + 8  + 7 = 1$   | 32. $ -6x - 4  \leq -9$      | 52. $ \frac{8x-6}{8}  > -9$    |
| 13. $ -2x + 4  + 9 = 1$  | 33. $ 10x - 8  < 7$          | 53. $ \frac{6x+11}{9}  \leq 7$ |
| 14. $ -8x - 8  + 3 = 2$  | 34. $ 5x + 4  \leq -8$       | 54. $ \frac{-2x-5}{2}  < -8$   |
| 15. $ 6x + 1  + 2 = 5$   | 35. $ -2x - 3  > 4$          | 55. $ \frac{-7x+7}{3}  \geq 4$ |
| 16. $ 9x + 6  + 2 = 9$   | 36. $ 8x - 11  \geq 4$       | 56. $ \frac{-x+2}{3}  > 4$     |
| 17. $ -7x + 9  + 7 = 8$  | 37. $ -6x + 4  \geq 9$       | 57. $ \frac{10x+5}{2}  > 9$    |
| 18. $ -4x + 5  + 4 = 3$  | 38. $ -8x - 7  < 9$          | 58. $ \frac{x+3}{9}  \geq 9$   |
| 19. $ 2x + 9  + 8 = 4$   | 39. $ -6x - 6  < 8$          | 59. $ \frac{-9x-3}{4}  > 8$    |
| 20. $ -6x - 3  + 9 = 2$  | 40. $ 5x - 9  \geq 2$        | 60. $ \frac{-2x+5}{8}  > 2$    |

1.  $\{1, 17/15\}$
2.  $\emptyset$
3.  $\{-10/9, 4/9\}$
4.  $\emptyset$
5.  $\{-19/10, -11/10\}$
6.  $\{-1, -1/5\}$
7.  $\{5, 14\}$
8.  $\{-1, 5/4\}$
9.  $\{-3/2, 5/2\}$
10.  $\{-20/19, -16/19\}$
11.  $\{-18, 9\}$
12.  $\emptyset$
13.  $\emptyset$
14.  $\emptyset$
15.  $\{-2/3, 1/3\}$
16.  $\{-13/9, 1/9\}$
17.  $\{8/7, 10/7\}$
18.  $\emptyset$
19.  $\emptyset$
20.  $\emptyset$
21.  $\{-8/11, 8/9\}$
22.  $\{-19/6, -3/8\}$
23.  $\{-2/5, 5/4\}$
24.  $\{-19, 3/5\}$
25.  $\{-4/7, 26/3\}$
26.  $\{-5/7, 7/11\}$
27.  $\{-8/15, 30\}$
28.  $\{-3, 5/7\}$
29.  $\{-2, 1/3\}$
30.  $\{14/11, 22/7\}$
31.  $(-\infty, 0) \cup (2/7, \infty)$
32.  $\emptyset$
33.  $(1/10, 3/2)$
34.  $\emptyset$
35.  $(-\infty, -7/2) \cup (1/2, \infty)$
36.  $(-\infty, 7/8] \cup [15/8, \infty)$
37.  $(-\infty, -5/6] \cup [13/6, \infty)$
38.  $(-2, 1/4)$
39.  $(-7/3, 1/3)$
40.  $(-\infty, 7/5] \cup [11/5, \infty)$
41.  $[-3/2, -1/2]$
42.  $(-\infty, 5/4] \cup [9/4, \infty)$
43.  $[2/9, 4/9]$
44.  $(-1/3, 1)$
45.  $(-\infty, 7/10] \cup [9/10, \infty)$
46.  $\emptyset$
47.  $(-\infty, -7/10) \cup (-1/2, \infty)$
48.  $(-\infty, \infty)$
49.  $[-4/5, 2]$
50.  $(-\infty, 2/7] \cup [4/7, \infty)$
51.  $(-\infty, -7/6] \cup [1/2, \infty)$
52.  $(-\infty, \infty)$
53.  $[-37/3, 26/3]$
54.  $\emptyset$
55.  $(-\infty, -5/7] \cup [19/7, \infty)$
56.  $(-\infty, -10) \cup (14, \infty)$
57.  $(-\infty, -23/10) \cup (13/10, \infty)$
58.  $(-\infty, -84] \cup [78, \infty)$
59.  $(-\infty, -35/9) \cup (29/9, \infty)$
60.  $(-\infty, -11/2) \cup (21/2, \infty)$