

CRCT GPS Practice Chapter 12

LESSON 12-1

Solve. Check each answer.

1. $4c - 13 = 15$

2. $3h + 14 = 23$

3. $-5j - 13 = 22$

4. $\frac{e}{7} + 2 = 5$

5. $\frac{m}{6} - 3 = 1$

6. $\frac{x}{3} + 5 = -13$

7. If you multiply the number of DVDs Sarah has by 6 and then add 5, you get 41. How many DVDs does Sarah have?

LESSON 12-2

Solve.

8. $2w - 11 + 4w = 7$

9. $7v + 5 - v = 11$

10. $-7z + 4 - z = -12$

11. $\frac{5x - 7}{3} = 15$

12. $2t - 7 - 5t = 11$

13. $\frac{6t + 8}{5} = 2$

14. $12a - 3 - 8a = -1$

15. $\frac{2.9h - 5.1}{2} = 4.7$

16. $\frac{3s - 14}{4} = 4$

17. $\frac{10 - 4t}{8} = -12$

18. Erika has received scores of 82, 87, 93, 95, 88, and 90 on math quizzes. What score must Erika get on her next quiz to have an average of 90?

LESSON 12-3

Group the terms with variables on one side of the equal sign, and simplify.

19. $6a = 4a - 8$

20. $3d - 5 = 7d - 9$

21. $-2j + 6 = j - 3$

22. $7 + 5m = 2 - m$

Solve.

23. $7y - 9 = -2y$

24. $2c - 13 = 5c + 11$

25. $\frac{2}{5}g + 9 = -6 - \frac{6}{10}g$

26. $7d + 4 = 8 - d$

27. $-3p + 8 = -7p - 12$

28. $1.2k + 2.3 = -0.5k + 7.4$

29. Roberta and Stanley are collecting signatures for a petition. So far, Roberta has twice as many signatures as Stanley. If she collects 30 more signatures, she will have 4 times as many signatures as Stanley currently has. How many signatures has Stanley collected?
30. Gym members pay \$3 per workout with a one time membership fee of \$98. Nonmembers pay \$10 per workout. How many workouts would both a member and a nonmember have to do to pay the same amount?

LESSON 12-4

Write an inequality for each situation.

31. The cafeteria could hold no more than 50 people.
 32. There were fewer than 20 boats in the marina.

Graph each inequality.

33. $y < -2$ 34. $f \geq 3$ 35. $n \leq -1.5$ 36. $x > 4$

Graph each compound inequality.

37. $1 < s < 4$ 38. $-1 \leq v < 2$ 39. $w < 0$ or $w \geq 5$ 40. $-3.5 \leq y < -2$

LESSON 12-5

Solve. Then graph each solution set on a number line.

41. $c - 6 > -5$ 42. $v - 3 \geq 1$ 43. $w - 6 \leq -7$ 44. $a - 2 \leq 5$

Solve. Check each answer.

45. $q + 3 \leq 5$ 46. $m + 1 > 0$ 47. $p + 7 \leq 4$ 48. $z + 2 \geq -3$

49. By Saturday night, 3 inches of rain had fallen in Happy Valley. The weekend forecast predicted at least 8 inches of rain. How much more rain must fall on Sunday for this forecast to be correct?

LESSON 12-6

Solve. Check each answer.

50. $\frac{a}{5} \leq 4.5$ 51. $-\frac{v}{2} > 2$ 52. $\frac{x}{3.9} \geq -2$ 53. $-\frac{c}{4} < 2.3$
 54. $13y < 39$ 55. $2t \leq 5$ 56. $-7r > 56$ 57. $3s \geq -4.5$

58. The local candy store buys candy in bulk and then sells it by the pound. If the store owner spends \$135 on peppermints and then sells them for \$3.50 per pound, how many pounds must he sell to make a profit?

LESSON 12-7

Solve. Then graph each solution set on a number line.

59. $\frac{m}{3} - 1 \leq 2$ 60. $7.2x - 4.8 > 24$ 61. $-5.5h + 2 < 13$
 62. $-1 - \frac{s}{3.5} \geq 1$ 63. $-\frac{w}{1.5} - 8 \leq -10$ 64. $4j - 6 > 16$
 65. $5 - 2u < 15$ 66. $\frac{r}{7} - 1 \geq 0$ 67. $5 - \frac{m}{9} \leq 17$

68. Jill, Serena, and Erin are trying to earn enough money to rent a beach house for a week. They estimate that it will cost at least \$1,650. If Jill has already earned \$600, how much must each of the others earn?