

Solve and check **at least 20 of the 30 equations**. You **must** do problems #3, 7, 9, 14 and 28.

1. $q - (-4.2) = 6.5$

2. $14 - q = -19$

3. $-\frac{5}{6}c = -20$

CHECK:

CHECK:

CHECK:

4. $7n - 15n + 16 = -32$

5. $-6b = -9b + 25$

6. $4f - 9 = 8f - 23$

CHECK:

CHECK:

CHECK:

7. $5 - \frac{1}{6}y = \frac{2}{5}y$

8. $18 + 9z = -28$

9. $\frac{m}{6} = -9.2$

CHECK:

CHECK:

CHECK:

10. Write out IN WORDS how to solve the following equation.

$$-3(k - 6) + 2k = 12$$

11. $6x + 29 = -4x - 1$

12. $-4 + 2x - 12 = -17$

13. $3(x - 1) = x + 9$

CHECK:

CHECK:

CHECK:

14. $4a - 2(3a - 5) = 5(5 - a)$

15. $3n - (-21) = 7n - 7$

16. $-18 - 4c = 5 + 9c$

CHECK:

CHECK:

CHECK:

17. $5m + 3m + 4 = -2m$

18. $-\frac{3}{2}m = \frac{6}{5}$

19. $16 = 5(1 - x)$

CHECK:

CHECK:

CHECK:

$$20. \quad n - \left(-\frac{3}{4}\right) = \frac{15}{4}$$

$$21. \quad 9p + 7(-2p - 1) = 17 - 4p$$

$$22. \quad 50 = w - 7$$

CHECK:

CHECK:

CHECK:

$$23. \quad \frac{k}{-2} = -5$$

$$24. \quad 14 - h = 16$$

$$25. \quad 26 = 3c$$

CHECK:

CHECK:

CHECK:

$$26. \quad 19x - 12 = 4(6 - 4x)$$

$$27. \quad -8v + 5 = -3v - 25$$

$$28. \quad \frac{1}{4}n + 3 = 2$$

CHECK:

CHECK:

CHECK:

$$29. \quad 44 = -12d + 65$$

$$30. \quad m + 4 = 0.5$$

CHECK:

CHECK:

You must complete the remainder of the review to receive full credit.

Solve the following equations for the given variable.

31. $A = lw$ for w

32. $P = 4s$ for s

33. $S = 2\pi r^2 + 2\pi rh$ for h

34. $I = Prt$ for P

Solve the following equations for y .

35. $x + y = -7$

36. $y - x = 22$

37. $-3x + y = 15$

38. $y - 8x = 10$

39. $3x + 2y = 6$

40. $-5x + 10y = 40$

Find the complement and supplement for each angle. If this is not possible, write “not possible.”
Show your calculations.

41. 89° complement = _____

42. $(x - 8)^\circ$ complement = _____

supplement = _____

supplement = _____

43. If the angles in a triangle are $2x + 6$, $3x - 4$, and $5x + 8$, find the measure of each angle.
44. Create a set with at least six items whose median is 12.
45. Create a set with at least six items whose mean is 12.
46. Create a set with at least six items whose mode is 12.
47. Jon wanted to collect 200 pieces of Halloween candy this year. He already had 20 pieces in his bag when he started counting. If he can get 40 pieces of candy in 1 hour, how many hours will it take him to reach his goal? Write and solve an equation for the number of hours, h .
48. You and your cousin are earning money for your family's vacation trip. Your cousin averages \$15 a week babysitting and receives a \$5 bonus. You average \$10 a week mowing lawns and \$8 a week running errands for neighbors. After working the same number of weeks, you end up with \$7 more than your cousin. How many weeks did you work? (Guess and test to solve the problem if you can't come up with an equation!)

BONUS: Solve and check the following equation: $0.75 - r(r - 0.5) = r(3 - r)$