

6.1 Worksheet #1

Math 9

Name: _____

Part 1 – Show all work on this worksheet if possible – attach extra paper if needed.

Solve for x

1. $x + 20 = 50$

6. $x + 14 = -12$

11. $-5x = 100$

16. $\frac{2}{6}x = 10$

21. $21 = -x + 4$

3. $21 = x - 3$

8. $-3 = x + 100$

13. $\frac{x}{11} = 3$

18. $\frac{3}{x} = \frac{12}{5}$

23. $\frac{-x}{4} = -22$

Part 2

Solve for the variable. Show your work.

1. $x + 8 = 11$

14. $15 = b - 15$

27. $6u = 10$

40. $\frac{a}{-10} = 4$

3. $a - 9 = 1$

16. $2x = 100$

29. $35 = 15m$

42. $\frac{5}{6} = \frac{h}{-24}$

4. $4 = t + 5$

17. $12 = 6g$

30. $-6t = 15$

43. $\frac{2}{3}y = 6$

Part 3

Solve for the variable. Show your work.

1. $3t + 9 = 27$

13. $19 = -5 - 8m$

25. $14 = 3u - u$

37. $3x + 15 + 5x = 15$

3. $6k - 27 = 3$

15. $8m - 3 = 9$

27. $3 = 1 + 6c$

39. $22 = -4x - 4$

Part 4

Solve for the variable. Show your work.

1. $3(x - 2) = 24$

7. $5r - (4r + 3) = 7$

2. $4(3b - 5) = 28$

8. $3 - (6u - 7) = 4u - 2$

6.1 Worksheet #2

Math 9

Name: _____

Part 1 – Show all work on this worksheet if possible – attach extra paper if needed.

Solve for the variable

1. $3y + 15 = 40$

4. $-9 + 7r = -26$

7. $31 = 80 - 24f$

10. $15n - 7 + 2n - 41 = 1$

3. $16 - 5u = 26$

6. $2a + 9 - 4a = 20$

9. $33 = 7p + 16$

12. $25 = 10k$

Part 2

Solve for the variable. Show your work.

9. $10 = 6b - 5$

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

33. $12b + 14 - 3b = 16$

45. $8 = -12b - 6 + 4b$

11. $-20 = 40 + 5n$

23. $5a - 1 = 4 - 8$

35. $-13 = 2n - 2 + 9n$

47. $3 = 5t - 11 + 14$

12. $87 = 15 + 6c$

24. $3y - 2y + y = 5 - 11$

36. $24 = a + 3a + 6 - 2a$

48. $-4r + 2 = -7 + 9$

Part 3

Solve for the variable. Show your work.

13. $5(2 + 3b) = 15 - (b - 7)$

32. $2(5c - 1) - 3(c - 7) - 6 = -8$

15. $5(3a + 1) - 3(a - 7) = 16 + 7a$

34. $14x - (4x + 12) - 11x - (3 - 4x) = 0$

17. $91 - 5(p + 20) = 48 - 8(p + 3)$

36. $q + 7 - 2(q - 2) = 3(2q + 1) + 5q$

18. $7v - 4(v - 9) = 4(5v + 9)$

37. $6(a - 2) - (a - 5) - 3(a + 9) = 0$

6.1 Worksheet #3

Math 9

Name: _____

Part 1 – Show all work on this worksheet if possible – attach extra paper if needed.

Solve for the variable.

26. $-4f + 4 = 10 - (2f - 6)$

45. $2[x + 3(x - 1)] = 7x - 1$

28. $5q - 5 - (q - 4) = 5$

47. $2x - 4[6x - 4(x + 1)] = 2(3x + 5)$

30. $u - 5 = -18 - (5u + 3)$

49. $3x - 2\{5 - 4[2x - (1 - x)]\} = 36$

17. $\frac{d}{3} + \frac{3d}{4} = 1$

38. $\frac{d+5}{6} - \frac{d+3}{4} = \frac{d-1}{9}$

19. $\frac{1}{2}x = \frac{1}{3}x + 5$

40. $\frac{2x+4}{5} + \frac{6-7x}{15} = 2$

21. $\frac{1}{2}y - 3 = 4 + \frac{2}{3}y$

42. $\frac{p-3}{4} - \frac{3p-5}{8} = \frac{2p-4}{5}$

43. $6 - \frac{a-1}{2} - \frac{3-a}{4} = \frac{a-2}{3}$

59. $\frac{5}{6}(4-2x) - \frac{7}{8}(4-x) = -x-1$

Part 2

Solve for the variable that is bolded.

$$8. h = \frac{a}{w}$$

$$21. p = 2a + 2b$$

$$34. 3(x - 4c) - 6c = 0$$

$$10. b + x = a$$

$$23. 3x + 2a = 8a$$

$$36. 3x - 10d = 4(d - x)$$

$$12. -b + x = h$$

$$25. 4x + 6a = -6a$$

$$38. t = a + d(n - 1)$$