

Student Name: _____

Subject: Mathematics

Grade: 9 Advanced

Subject Teacher: Abdulkader Amro

Date: _____

Assessment Type: Multiple Choice

M2L2 Solving One-Step Equations

Choose the one correct answer for each question. Show your work where appropriate.

Directions: Select A, B, C, or D. Each question has exactly one correct answer.

1. Solve: $v - 9 = 14$

A. $v = 5$

B. $v = 23$

C. $v = -23$

D. $v = 14$

2. Solve: $44 = t - 72$

A. $t = 28$

B. $t = 116$

C. $t = -116$

D. $t = 100$

3. Solve: $-61 = d + (-18)$

A. $d = -79$

B. $d = -43$

C. $d = 43$

D. $d = -18$

4. Solve: $18 + z = 40$

A. $z = 58$

B. $z = -22$

C. $z = 22$

D. $z = 40$

5. Solve: $-4a = 48$

A. $a = -12$

B. $a = 12$

C. $a = -192$

D. $a = 192$

6. Solve: $12t = -132$

A. $t = 11$

B. $t = -11$

C. $t = -120$

D. $t = 120$

7. Solve: $18 - (-f) = 91$

A. $f = -73$

C. $f = 73$

B. $f = 109$

D. $f = 91$

8. Solve: $-16 - (-t) = -45$

A. $t = 29$

C. $t = -61$

B. $t = -29$

D. $t = 61$

9. Solve: $\frac{1}{3}v = -5$

A. $v = -15$

C. $v = 15$

B. $v = \frac{-5}{3}$

D. $v = \frac{5}{3}$

10. Solve: $\frac{u}{8} = -4$

A. $u = -32$

C. $u = 32$

B. $u = -2$

D. $u = 2$

11. Solve: $\frac{a}{6} = -9$

A. $a = -54$

C. $a = 54$

B. $a = -15$

D. $a = 15$

12. Solve: $\frac{-k}{5} = \frac{7}{5}$

A. $k = 7$

C. $k = 35$

B. $k = -7$

D. $k = -35$

13. Solve: $\frac{3}{4} = w + \frac{2}{5}$

A. $w = \frac{7}{20}$

C. $w = \frac{-7}{20}$

B. $w = \frac{23}{20}$

D. $w = \frac{3}{20}$

14. Solve: $\frac{-1}{2} + a = \frac{5}{8}$

A. $a = \frac{1}{8}$

C. $a = \frac{9}{8}$

B. $a = \frac{-9}{8}$

D. $a = \frac{13}{8}$

15. Solve: $\frac{-t}{7} = \frac{1}{15}$

A. $t = \frac{7}{15}$

C. $t = \frac{15}{7}$

B. $t = \frac{-15}{7}$

D. $t = \frac{-7}{15}$

16. Solve: $\frac{5}{7} = y - 2$

A. $y = \frac{19}{7}$

B. $y = \frac{9}{7}$

C. $y = \frac{-19}{7}$

D. $y = \frac{19}{5}$

17. Solve: $v + 914 = -23$

A. $v = 891$

B. $v = -937$

C. $v = -891$

D. $v = 937$

18. Solve: $447 + x = -261$

A. $x = -708$

B. $x = -186$

C. $x = 708$

D. $x = 186$

19. Solve: $-(\frac{1}{7})c = 21$

A. $c = -147$

B. $c = -3$

C. $c = 147$

D. $c = 3$

20. Solve: $-(\frac{2}{3})v = -22$

A. $v = -33$

B. $v = 33$

C. $v = \frac{44}{3}$

D. $v = -\frac{44}{3}$

21. Solve: $(\frac{3}{5})q = -15$

A. $q = -9$

B. $q = 25$

C. $q = -25$

D. $q = 9$

22. Solve: $\frac{n}{38} = -\frac{1}{4}$

A. $n = -4$

B. $n = 2$

C. $n = -2$

D. $n = 4$

23. Solve: $\frac{c}{4} = \frac{-9}{8}$

A. $c = \frac{-9}{2}$

B. $c = \frac{-9}{32}$

C. $c = \frac{9}{2}$

D. $c = \frac{9}{8}$

24. Solve: $\frac{2}{3} + r = \frac{-4}{9}$

A. $r = \frac{-2}{9}$

B. $r = \frac{-10}{9}$

C. $r = \frac{10}{9}$

D. $r = \frac{-4}{9}$

25. Solve: $y - 7 = 8$

A. $y = 1$

B. $y = 15$

C. $y = -15$

D. $y = 56$

26. Solve: $w + 14 = -8$

A. $w = 6$

B. $w = -22$

C. $w = 22$

D. $w = -6$

27. Solve: $p - 4 = 6$

A. $p = 2$

B. $p = -10$

C. $p = 10$

D. $p = -2$

28. Solve: $-13 = 5 + x$

A. $x = -8$

B. $x = 18$

C. $x = -18$

D. $x = 8$

29. Solve: $98 = b + 34$

A. $b = 64$

B. $b = 132$

C. $b = -64$

D. $b = 34$

30. Solve: $y - 32 = -1$

A. $y = 31$

B. $y = -33$

C. $y = 33$

D. $y = -31$

31. Solve: $n + (-28) = 0$

A. $n = -28$

B. $n = 0$

C. $n = 28$

D. $n = 56$

32. Solve: $v + (-10) = 6$

A. $v = -16$

B. $v = -4$

C. $v = 4$

D. $v = 16$

33. Solve: $-1 = t + (-19)$

A. $t = -20$

C. $t = -18$

B. $t = 18$

D. $t = 20$

34. Solve: $j - (-17) = 36$

A. $j = 19$

C. $j = -19$

B. $j = 53$

D. $j = 13$

35. Solve: $14 = d + (-10)$

A. $d = 4$

C. $d = -24$

B. $d = 24$

D. $d = -4$

36. Solve: $u + (-5) = -15$

A. $u = -20$

C. $u = 10$

B. $u = -10$

D. $u = 20$

37. Solve: $11 = -16 + y$

A. $y = -27$

C. $y = 27$

B. $y = 5$

D. $y = -5$

38. Solve: $c - (-3) = 100$

A. $c = 97$

C. $c = -97$

B. $c = 103$

D. $c = -103$

39. Solve: $47 = w - (-8)$

A. $w = 55$

C. $w = -39$

B. $w = 39$

D. $w = 47$

40. Solve: $x - (-74) = -22$

A. $x = 52$

C. $x = -148$

B. $x = -96$

D. $x = 96$

41. Solve: $4 - (-h) = 68$

A. $h = 64$

C. $h = 72$

B. $h = -64$

D. $h = -72$

42. Solve: $-56 = 20 - (-j)$

A. $j = -76$

C. $j = -36$

B. $j = 76$

D. $j = 36$

43. Solve: $12z = 108$

A. $z = 9$

C. $z = 12$

B. $z = -9$

D. $z = 120$

44. Solve: $-7t = 49$

A. $t = 7$

C. $t = -56$

B. $t = -7$

D. $t = 56$

45. Solve: $18f = -216$

A. $f = 12$

C. $f = -12$

B. $f = -198$

D. $f = 198$

46. Solve: $-22 = 11v$

A. $v = 2$

C. $v = -11$

B. $v = -2$

D. $v = 11$

47. Solve: $-6d = -42$

A. $d = -7$

C. $d = 36$

B. $d = 7$

D. $d = -36$

48. Solve: $96 = -24a$

A. $a = 4$

C. $a = 72$

B. $a = -4$

D. $a = -72$

49. Solve: $\frac{c}{4} = 16$

A. $c = 4$

C. $c = 20$

B. $c = 12$

D. $c = 64$

50. Solve: $\frac{g}{16} = 9$

A. $g = 25$

C. $g = 7$

B. $g = 144$

D. $g = -144$

51. Solve: $-84 = \frac{d}{3}$

A. $d = -28$

C. $d = -252$

B. $d = 28$

D. $d = 252$

52. Solve: $\frac{-d}{7} = -13$

A. $d = -91$

B. $d = 91$

C. $d = 20$

D. $d = -20$

53. Solve: $\frac{t}{4} = -13$

A. $t = -52$

B. $t = -17$

C. $t = 52$

D. $t = 17$

54. Solve: $31 = -(\frac{1}{6})n$

A. $n = -186$

B. $n = -36$

C. $n = 186$

D. $n = 36$

55. SUPREME COURT: Chief Justice William Rehnquist served on the Supreme Court for 33 years until he died in 2005. Which equation and solution determine the year he was confirmed as a justice?

A. $y + 33 = 2005$; $y = 1972$

B. $y - 33 = 2005$; $y = 2038$

C. $33y = 2005$; $y = 60.76$

D. $2005 + 33 = y$; $y = 2038$

56. SALARY: In a recent year, the annual salary of the Governor of New York was \$179,000. During the same year, the annual salary of the Governor of Tennessee was \$94,000 less than that. Which equation and solution find Tennessee's salary?

A. $179,000 + 94,000 = t$; $t = \$273,000$

B. $179,000 - 94,000 = t$; $t = \$85,000$

C. $94,000 - 179,000 = t$; $t = -\$85,000$

D. $\frac{179,000}{94,000} = t$; $t \approx \$1,904$

57. WEATHER: The temperature dropped 21 degrees over the course of the day to -9°C . Which equation and solution determine the temperature at the beginning of the day?

A. $t + 21 = -9$; $t = -30^{\circ}\text{C}$

B. $t - 21 = -9$; $t = 12^{\circ}\text{C}$

C. $21 - t = -9$; $t = 30^{\circ}\text{C}$

D. $t - 9 = -21$; $t = -12^{\circ}\text{C}$

58. FARMING: The Rolling Hills Farm is 126 acres. This is $\frac{1}{4}$ the size of the Briarwood Farm. Which equation and solution find the size of Briarwood Farm?

A. $\frac{B}{4} = 126$; $B = 31.5$ acres

B. $4B = 126$; $B = 504$ acres

C. $(\frac{1}{4})B = 126$; $B = 504$ acres

D. $B - 126 = \frac{1}{4}$; $B = 126.25$ acres

59. SOCCER: During the season, 13% of the players who signed up for the soccer league dropped out. A total of 174 players finished the season. Which choice correctly gives the variable, expression, equation, and solution?

A. Let x be the number who signed up; finished $= 0.87x$; $0.87x = 174$; $x = 200$	B. Let x be the number who finished; signed up $= 0.87x$; $0.87x = 174$; $x = 200$
C. Let x be the number who signed up; finished $= 0.13x$; $0.13x = 174$; $x = 1,338.46$	D. Let x be the number who signed up; finished $= x + 0.13x$; $1.13x = 174$; $x \approx 153.98$

60. Write an equation for the sentence, then solve: Six times a number is 132.

A. $6n = 132$; $n = 22$	B. $6 + n = 132$; $n = 126$
C. $\frac{n}{6} = 132$; $n = 792$	D. $6n = 22$; $n = 132$

61. Write an equation for the sentence, then solve: Two thirds equals negative eight times a number.

A. $\frac{2}{3} = 8n$; $n = \frac{1}{12}$	B. $\frac{2}{3} = -8n$; $n = -\frac{1}{12}$
C. $\frac{2}{3} = -8 + n$; $n = 26/3$	D. $-\frac{2}{3} = -8n$; $n = \frac{1}{12}$

62. Write an equation for the sentence, then solve: Five elevenths times a number is 55.

A. $(\frac{5}{11})n = 55$; $n = 121$	B. $5n = 55$; $n = 11$
C. $(\frac{11}{5})n = 55$; $n = 25$	D. $(\frac{5}{11}) + n = 55$; $n = 55 - \frac{5}{11}$

63. Write an equation for the sentence, then solve: Four fifths is equal to ten sixteenths of a number.

A. $\frac{4}{5} = (\frac{10}{16})n$; $n = \frac{8}{25}$	B. $\frac{4}{5} = (\frac{10}{16})n$; $n = \frac{32}{25}$
C. $\frac{4}{5} = (\frac{16}{10})n$; $n = \frac{1}{2}$	D. $\frac{4}{5} = \frac{10}{16} + n$; $n = \frac{3}{20}$

64. Write an equation for the sentence, then solve: Three and two thirds times a number equals two ninths.

A. $(\frac{11}{3})n = \frac{2}{9}$; $n = \frac{2}{33}$	B. $(\frac{11}{3})n = \frac{2}{9}$; $n = \frac{22}{3}$
C. $(3 + \frac{2}{3}) + n = \frac{2}{9}$; $n = -\frac{31}{9}$	D. $(\frac{8}{3})n = \frac{2}{9}$; $n = \frac{1}{12}$

65. Write an equation for the sentence, then solve: Four and four fifths times a number is one and one fifth.

A. $(\frac{24}{5})n = \frac{6}{5}$; $n = 1/4$	B. $(\frac{24}{5})n = \frac{6}{5}$; $n = 4$
C. $(4 + \frac{4}{5}) + n = 1 + \frac{1}{5}$; $n = \frac{-18}{5}$	D. $(\frac{20}{4})n = \frac{6}{5}$; $n = \frac{3}{10}$