

Unit 1 Practice Test: The Number System Name: _____**7th Grade Accelerated Math****For 1–24, evaluate each completely. Show work on blank piece of paper when possible.**

1. $(-5)(-7)(2)$

#1 answer: _____

2. $9 - 13$

#2 answer: _____

3. $-6 - 11$

#3 answer: _____

4. $-14 + (-5)$

#4 answer: _____

5. $-4 - (-3)$

#5 answer: _____

6. $-|-8 + 5|$

#6 answer: _____

7. $-6 \cdot 5$

#7 answer: _____

8. $-28 \div -4$

#8 answer: _____

9. $48 \div -6$

#9 answer: _____

10. $-14 + 8 - 5 - 8$

#10 answer: _____

11. $-5 - 7 + 3 + 3$

#11 answer: _____

12. -7^2

#12 answer: _____

13. $\frac{-72}{-9}$

#13 answer: _____

14. $-a + -15$
 $a = -2$

#14 answer: _____

15. $a - b$
 $a = -9, b = -7$

#15 answer: _____

16. $a^2 - 49$
 $a = -7$

#16 answer: _____

17. $-a - b$
 $a = 4, b = |-3|$

#17 answer: _____

18. $(-7)^2 \cdot -2 + 8$

#18 answer: _____

19. $2\frac{1}{8} + \frac{3}{4}$

#19 answer: _____

20. $2\frac{1}{8} \cdot \frac{4}{5}$

#20 answer: _____

21. $-2\frac{1}{8} \div 6\frac{1}{2}$

#21 answer: _____

22. $-3\frac{1}{6} + 3\frac{3}{4}$

#22 answer: _____

23. $-8 \div -4\frac{4}{7}$

#23 answer: _____

24. $-5\frac{1}{2} - 2\frac{3}{5}$

#24 answer: _____

25. Julie is a cheerleader and is making a banner to use at games. She needs $1\frac{8}{9}$ of a yard of material for the banner, but she only has $\frac{3}{4}$ of a yard right now. Distinguish how much more material she needs? Show your work for full credit!

#25 answer: _____

26. An Italian sausage is 10 inches long. Distinguish how many pieces of sausage can be cut from the 10-inch piece of sausage if each piece is to be two-thirds of an inch? Show your work for full credit!

#26 answer: _____

27. Ryan is planting a garden that takes up $\frac{1}{4}$ of his backyard. He plans to plant flowers in only $\frac{1}{3}$ of the garden. Distinguish how much of his backyard will be made up of flowers? Show your work for full credit!

#27 answer: _____

28. Fill in the table below:

Fraction	Decimal	Percent
$\frac{3}{4}$		
		9%
	0.67	
$\frac{1}{9}$		
	3.5	

For 29–40, evaluate each completely.

29. $\sqrt{81}$

30. $-\sqrt{36}$

31. $\sqrt[3]{27}$

32. $-\sqrt[3]{125}$

#29 answer: _____

#30 answer: _____

#31 answer: _____

#32 answer: _____

33. $\sqrt{-25}$

34. $\sqrt{289}$

35. $\sqrt[3]{-125}$

36. $\sqrt[3]{216}$

#33 answer: _____

#34 answer: _____

#35 answer: _____

#36 answer: _____

37. $\pm\sqrt{\frac{64}{100}}$

38. $\sqrt{\frac{16}{49}}$

39. Find the square roots of 64

#37 answer: _____

#38 answer: _____

#39 answer: _____

40. $\sqrt{3(4) - 16 \div 4 + 9 \cdot 2 - 1}$

For 41–43, estimate each to the nearest tenths place .

41. $\sqrt{52}$

42. $\sqrt{7}$

43. $\sqrt{97}$

#40 answer: _____

#41 _____

#42 _____

#43 _____

Order the following from least to greatest.

44. $\sqrt{7}$, 3, π , $\sqrt{5}$, 2, 3.5 #44: _____

For 45–47, write each of the following numbers in scientific notation.

45. 820,000,000

46. 0.0000065

47. 6.7E-5

#45: _____

#46: _____

#47: _____

For 48–50, write each of the following numbers in standard notation.

48. 4.26×10^{-7}

49. 9.2×10^{-5}

50. 2.734×10^{12}

#48: _____

#49: _____

#50: _____

For 51–54, write each answer using scientific notation.

51. $5.8 \times 10^8 - 2.3 \times 10^5$

52. $1.8 \times 10^3 + 5.4 \times 10^6$

#51: _____

#52: _____

53. $8.4 \times 10^9 \div 2.1 \times 10^5$

54. $3.1 \times 10^7 \bullet 4.6 \times 10^3$

#53: _____

#54: _____

For 55–62, determine if the following numbers are Rational (R) or Irrational (I).

55. $\sqrt{5}$ 56. π 57. $\sqrt{16}$ 58. 58.71

#55 _____ #56 _____ #57 _____ #58 _____

59. 11 60. -3 61. 7.13945... 62. 5.464646...

#59 _____ #60 _____ #61 _____ #62 _____

For 63–67, use the following information. Mr. Roy's first hour earned the following scores (as a percent) on this test:

94, 88, 85, 96, 81, 74, 88, 91, 101, 98, 93, 82, 34, 77, 83

63. Identify the mean score on the test. (Nearest tenth) #63 _____

64. Identify the median score on the test. #64 _____

65. Identify the mode(s). #65 _____

66. Identify the range . #66 _____

67. Distinguish which of the above is the best way to represent this data #67 _____

(the best measure of central tendency)?
WHY? #67 Reason _____