Kerry Ojakian's MTH 28.5 Class
Class Assignment #4

1. $4^2 =$

2. $(-4)^2 =$

3. $(-3)^3 =$

4. $(-3)^4 =$

5. $1^8 =$

6. $0^8 =$

7. $45^1 =$

8. $(-45)^1 =$

9. $-3^2 =$

10. $(-3)^2 =$

11. $-1^5 =$

12. $(-1)^5 =$

13. $-1^6 =$

14. $(-1)^6 =$

Write the following in exponential form:

15. $7 \cdot 7 \cdot 7 =$

16. $(-8) \cdot (-8) =$

17. $(2)(2)(2)(2)(2)(2)(2) =$

18. $(-83)(-83)(-83)(-83) =$

Evaluate the following (but reorder first to make the calculation easier!):

19. $7 + 89 + (-7) - 89 =$

20. $(-8) + 34 + 8 + 1 + (-33) =$

Evaluate:

21. $3 + 5 \cdot (2) =$

22. $(3 + 5) \cdot (2) =$

23. $3 + 5 \cdot (-2) =$

24. $(3 + 5) \cdot (-2) =$

25. $1 + 2^3 =$

26. $(1 + 2)^3 =$

27. $10 - 4 =$

28. $4 - 10 =$

29. $|4 - 10| =$

30. $|10 - 4| =$

31. $-(10 - 4) =$

32. $-(4 - 10) =$

33. $-8 - 3^2 =$

34. $11 - 72 \div 9 =$

35. $18 - 42 \div 7 =$

36. $13 - 5 - 1 + 9 \div 3 =$

37. $5 \cdot 6 - (15 - 6) =$

38. $3 \cdot 9 - (35 - 1) =$

39. $9 + 3 - 12 =$

40. $17 - 10 - 8 =$

41. $10 + 6 \div 2 + (3)(-3) =$

42. $3 \cdot 4 \cdot 2 \div 4 + 3 =$

43. $2 \cdot 5 \cdot 10 \div 5 + 3 =$

44. $(2 \cdot 2)^2 =$

45. $(5 \cdot 2)^2 =$

46. $13 + 0 \div 7 =$

47. $9 + 10 \div 5 =$

48. $[12 \div (4 \div 2)]^2 =$

49. $[32 \div (8 \div 2)]^2 =$

50. $12 + 3 \cdot 2 + (3 + 5 \cdot 2) =$

51. $9 + 4 \cdot 5 + (8 + 4 \cdot 4) =$

52. $13 + 2(5 - 3) =$

53. $16 + 5(9 - 4) =$

54. $12 \div 3 \cdot 4 =$

55. $25 \div 5 \cdot 5 =$

56. $1 + (-9 + 7)^2 - 7 \cdot 2 =$

57. $2 \cdot |4 - 5|^3 - (5 - 4)^2 =$

Evaluate (don't let the fractions scare you!):

58. $\dfrac{2}{3} + \dfrac{5}{6} \cdot \dfrac{2}{5} =$

59. $\left(\dfrac{1}{2} + \dfrac{1}{2} \right) \cdot (5) =$

60. $\dfrac{6}{5} + \dfrac{1}{10} \cdot (-2) =$

61. $\dfrac{1}{2} + \left(\dfrac{1}{2} \right)^2 =$

62. $\left(1 + \dfrac{1}{2} \right)^2 =$

63. $\left| \dfrac{2}{3} - \dfrac{1}{6} \right| =$

64. $-\left(\dfrac{2}{5} - \dfrac{1}{10} \right) =$

65. $-\left(\dfrac{1}{10} - \dfrac{2}{5} \right) =$

66. $\dfrac{1}{3} - \dfrac{1}{6} \div \dfrac{1}{2} =$

67. $\dfrac{1}{3} - 4 \div \dfrac{1}{2} =$

68. $\dfrac{7}{8} \cdot \dfrac{1}{2} + \dfrac{1}{4} =$

69. $5 \cdot \dfrac{2}{5} + \left(\dfrac{1}{2} - 6 \right) =$

70. $\dfrac{4}{3} \cdot \dfrac{1}{8} - \left(\dfrac{1}{2} - 1 \right) =$

Evaluate each in TWO days - 1) just order of operations, 2) by first distributing.

71. $2 \cdot (3 + 2) =$

72. $(3 - 2) \cdot 4 =$

73. $(-2) \cdot (1 + 3) =$

74. $(-1 + 1) \cdot 10 =$

75. $2 \cdot (4 + 2 - 3) =$

76. $(-3 + 2 - 7) \cdot (-1) =$

No calculator! ...

77. Which fraction is larger $\dfrac{3}{8}$ or $\dfrac{3}{5}$?

78. Does $\dfrac{2}{8} = \dfrac{1}{4}$?

79. Does $\dfrac{17}{87} = \dfrac{3}{87}$?

80. The rational $\dfrac{1}{3}$ is between what two consecutive integers?

81. The rational $\dfrac{7}{3}$ is between what two consecutive integers?

82. The rational $-\dfrac{7}{3}$ is between what two consecutive integers?

83. Batting Average $= \dfrac{number\ of\ hits}{number\ of\ at\ bats}$ (usually written as a decimal)

   (a) Vic has a batting average of 0.349 and Mary has a batting average of 0.411. Whose batting average is larger?

   (b) If Vic has a batting average of 0.25 and was at bat 40 times, how many hits did he have?

84. A triangle has a base $\dfrac{7}{2}$ and a height 5. What is its area?

85. A triangle has a base $\dfrac{10}{3}$ and a height $\dfrac{3}{20}$. What is its area?

86. Suppose square is attached to the base of a triangle. The the base of the triangle is 7 and its height is 10. What is the area of the whole object?

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