Kerry Ojakian's MTH 23.5 Class
Class Assignment #2C

Without a calculator or Excel, calculate the following.

1. $--8 =$

2. $---2 =$

3. $|12.37| =$

4. $|-1| =$

5. $|---33| =$

6. $|0| =$

7. $3 + 5 =$

8. $5 + 3 =$

9. $3 \cdot 5 =$

10. $(5)(3) =$

11. $-3 \cdot 5 =$

12. $(-5)(-3) =$

13. $5 - 3 =$

14. $3 - 5 =$

15. $|5 - 3| =$

16. $|3 - 5| =$

17. $20 \div 5 =$

18. $-20 \div 5 =$

19. $\dfrac{10}{-2} =$

20. $\dfrac{-10}{-2} =$

21. $787 \cdot 0 =$

22. $999 + 547 + (-999) =$

23. $498 + 647 + (-497) =$

24. $3 + 2 + 4 + 1 =$

25. $3 - 2 + 5 + (-7) =$

26. $\dfrac{4 + 2 + 2 + 4}{2} =$

27. $\dfrac{4 + 2 + 2 + 4}{4} =$

Some word questions. Continue **without** a calculator or Excel.

28. Suppose your math class has 20 students, and then 7 students come in late, and then 9 students leave. How many students are in the class now?

29. Suppose Nike is shipping basketballs. Each truck has 500 basketballs, and there are 10 trucks. How many basketballs do we have all together?

30. Suppose 32 students get into 4 equal size groups. How big is each group?

31. Suppose 42 students get into groups of size 6. How many groups are there?

32. Vic has 10 jars, in each of which he put 5 balls. One day he redistributed the balls equally among 5 jars instead. How many balls are now in each jar?

Some statistics questions. Continue **without** a calculator or Excel.

33. The mean of the data: $4, 2, 64$.

34. The median of the data: $7, 1, 9$.

35. The mode of the data: $5, 1, 3, 5, 1, 3, 5, 9$.

36. The median of the data: $27, 20, 2, 10$.

37. If data has 7 items, in rows $1, 2, \ldots, 7$ (in order), what item(s) do you need to get the median?

38. If data has 8 items, in rows $1, 2, \ldots, 8$ (in order), what item(s) do you need to get the median?

39. If data has 101 items, in rows $1, 2, \ldots, 101$ (in order), what item(s) do you need to get the median?

40. If data has 100 items, in rows $1, 2, \ldots, 100$ (in order), what item(s) do you need to get the median?

41. Write an arithmetic expression (**without** calculating!) for the mean of $55, 78, 1003, 78$.

42. If X is the data: $5, 10, 0, 25$, find $\overline{X}$.

43. If X is the data: $7, 7, 1, 3$, find $\sum X$.

44. Suppose the population data is: $8, 5, 7, 3, 2$ and the sample data is $5, 3$. Find the sample mean and the population mean.

Use Excel to compute the following (write the Excel command you use AND the result).

45. Suppose a population has the following heights (in feet): $5.7, 6.0, 5.9, 6.0, 5.75$. Find μ.

46. Consider the data Y: $47, 86, 99, -34, 87, 87$. Find $\sum Y$ and $\overline{Y}$.

47. Find the mean of $1001, 8, 9, 15, 7, 9, 8, 9$

48. Find the median of $1001, 8, 9, 15, 7, 9, 8, 9$ (same data as last problem)

49. Consider the last two problems - which better represents the data, the mean or the median?