Precalc

Review 14.1-14.3
Quiz 14.3

MCT Ch. 14.1-14.3 is tomorrow

REVIEW EXERCISES

The table below gives the weight in ounces of the popular women's tennis shoes.

Weight (ounces)	Number of Shoes
9.5 9.0–10.0	2
10.5 10.0–11.0	18
11.5 11.0–12.0	5
12.5 12.0–13.0	2
13.5 13.0–14.0	3

$n = 30$

331 / 30

Also:
median 10.2
mean 11.03
MD $\frac{25.3}{30} = 0.84$
SD 1.06
variance $\frac{33.467}{30} = 1.12$

11. What is the range of the data?

12. What are the class marks?

13. Draw a histogram of the data.

13.5 30
12.5 27
11.5 25
10.5 20
9.5 2

$$1\left[\begin{matrix}10.5\\9.5\end{matrix}\right]x \qquad 13\left[\begin{matrix}20\\15\\2\end{matrix}\right]18$$

$$\frac{x}{1} = \frac{13}{18} \qquad 18x = 13 \qquad x = 0.72$$

Find the mean, median, and mode of each set of data.

14. {4, 8, 2, 4, 5, 5, 6, 7, 4}

15. {250, 200, 160, 240, 200}

16. {19, 11, 13, 15, 16}

17. {6.6, 6.3, 6.8, 6.6, 6.7, 5.9, 6.4, 6.3}

18.

stem	leaf
12	2 8
13	0 1 3 5
14	1 6

12 | 2 = 122

$\bar{x} = 5.4$

REVIEW EXERCISES

A number cube is tossed 10 times with the following results.

5 ~~1~~ 5 4 ~~2~~ ~~3~~ 6 ~~2~~ 5 ~~1~~

19. Find the interquartile range. 3

20. Find the semi-interquartile range. 1.5

21. Find the mean deviation. 1.6

22. Find the standard deviation. 1.7

Med 5.5

Q1 Q3

1, 1, (2), 2, 3, 4, 5, (5), 5, 6

$x_i - 3.4$	=
1	
1	
2	
2	
3	
4	
5	
5	
5	
6	

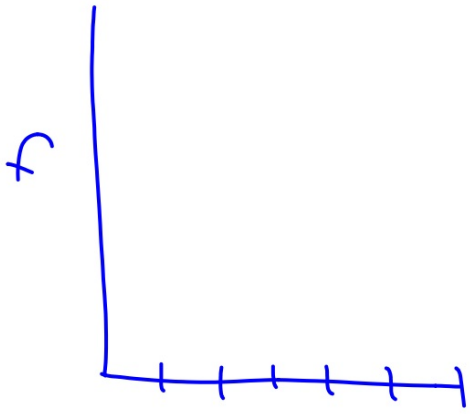
$\frac{30.4}{10}$

23. Var. (3.04)

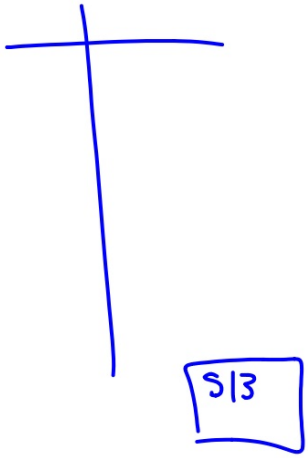
The scores for an exam given in physics class are given below.

82, 77, 84, 98, 93, 71, 76, 64, 89, 95, 78, 89, 65, 88, 54, 96, 87, 92, 80, 85, 93, 89, 55, 62, 79, 90, 86, 75, 99, 62

1. What is an appropriate class interval for the test scores? (Lesson 14-1) 5-8
2. Construct a frequency distribution of the test scores. (Lesson 14-1)
3. Draw a histogram of the test scores. (Lesson 14-1)



4. Make a stem-and-leaf plot of the test scores. (Lesson 14-2)



5. What is the mean of the test scores? (Lesson 14-2)

6. Find the median of the test scores. (Lesson 14-2)

7. Find the mode of the test scores. (Lesson 14-2)

8. Make a box-and-whisker plot of the test scores. (Lesson 14-3)

9. What is the mean deviation of the test scores? (Lesson 14-3)

10. Discuss the variability of the data. (Lesson 14-3)

18.

Class Limits	Frequency
53–61	3
61–69	7
69–77	11
77–85	38
85–93	19
93–101	12

From frequency table:
Median
Mean
Standard deviation/variance