

- 2 pts. each Identify the data set's level of measurement.
 - Whammy Burger sells fries in five sizes: small, medium, large, jumbo, galactic.
 - The times of day someone calls Whammy Burger to ask what sizes fries are available in: 10:59 AM, 12:04 PM, 1:39 PM, 3:33 PM, 6:10 PM, 6:13 PM, 9:25 PM.
 - The heights in feet of a sample of pine trees are: 45, 67, 54, 24, 63, 34, 16, 83, 26, 84, 38, 57, 27, 82.
 - The daily high temperatures in degrees Fahrenheit for Mohave in a week are: 93, 91, 86, 94, 102, 104, and 101.
 - The numbers on the shirts of a soccer team are: 45, 21, 9, 35, 25, 18, 22, 67, 40, 88, 65.

- 10 pts. Create a frequency distribution having six classes for the following data representing high temperatures during April 2003 for Willow Grove:

48	73	61	47	42	49	37	36
39	47	47	66	61	65	79	84
56	46	62	65	66	65	53	62
68	58	69	77	75	72		

- 10 pts. Make a relative frequency histogram out of the frequency distribution created in the previous problem, labeling each class using class midpoints.
- 10 pts. Make a frequency polygon out of the frequency distribution created in Problem 2.
- 10 pts. Make an ogive graph out of the frequency distribution created in Problem 2.
- 10 pts. Make a stem-and-leaf plot of the data in Problem 2 using six stems.
- 15 pts. Find the mean, median, and mode of the following data:

32 36 29 30 30 28 31 27 29 24 29 28 25 30

- 15 pts. Find the range, standard deviation, and variance for the data set in Problem 7, assuming it's a sample taken from a population.
- 5 pts. The mean length of the first 28 space shuttle flights was about 8 days and the standard deviation was about 2.5 days. Using Chebychev's Theorem, at least how many of the flights lasted between 0.5 days and 15.5 days?
- Using the data set in Problem 2, do the following.
 - 10 pts. Find the quartiles Q_1 , Q_2 , and Q_3 .
 - 5 pts. Construct a box-and-whisker plot.

11. 10 pts. In an astronomy course the final grade is broken down as follows:

- 24% = Midterm Exam
- 20% = Term Paper: Why Horoscopes Are Rubbish
- 18% = Asteroid Hunting
- 12% = Name That Constellation
- 10% = Setting Up the Telescope Without Wrecking it
- 10% = The Hardy-Weinberg Algorithm for Counting Shooting Stars Without Having to Take Off Your Shoes
- 6% = Manifesting a Modicum of Sentience

If Heisenberg got a 67% on the midterm, 92% on the term paper, 81% on the asteroid hunt, 100% on naming constellations, 73% on setting up a telescope, 25% on counting shooting stars, and 95% on sentience, what is Heisenberg's overall average for the course?