

Name:

College or University:

Website:

1. What is the city and state where your school is located? (1 point)
2. When was your school founded? (1 point)
3. What is the name of the president of your school? (1 point)
4. What is the phone number for the undergraduate admissions department? (1 point)
5. How many applications did your school receive for the most recent incoming freshmen class? (1 point)
6. How many students were accepted into the most recent incoming freshmen class? (1 point)
7. What % of applicants was accepted into the most recent incoming freshmen class? (1 point)
8. What is the average weighted GPA of the most recent incoming freshmen class? (1 point)
9. What is the mean SAT score of the most recent incoming freshmen class? If your school requires the ACT rather than the SAT, determine its mean score instead. (1 point)
10. What was the record of the men's basketball team this year? (1 point)
11. Who did your team play in the first round of the NCAA tournament this year? (1 point)

Complete the table about historical tuition for your school. (3 points)

Year	Annual Tuition	
	In State	Out of State
2000		
2001		
2002		
2003		
2004		
2005		
2006		
2007		

12. Determine the mean, median and mode of the annual in state tuition. (2 points)

- Mean →
- Median →
- Mode →

13. Determine the mean, median and mode of the annual out of state tuition. (2 points)

- Mean →
- Median →
- Mode →

14. Use the out of state data from your historical tuition table to answer the following 4 questions.

- Determine the equation for the line of best fit. (1 point)
- What is the slope of the equation and what does it mean in the context of this problem? (1 point)
- Using the equation, predict how much the tuition will be in 2011. (1 point)
- Using the equation, predict what the year will be when the tuition is 3 times the amount it currently is in 2007. (1 point)

FINAL PROBLEM (3 points)

The NCAA basketball tournament follows a very specific pattern. After each round, the number of teams is half of the previous round.

The sequence is: **64, 32, 16, 8, 4, 2, 1**

This type of sequence is a geometric sequence.

Your challenge is to determine the equation that represents this sequence. You may use any resource you want, but you may not ask your current math teacher because he seems to forget how to do this type of math problem.

The equation is:

25	100%	20	80%	15	60%	10	40%	5	20%
24	96%	19	76%	14	56%	9	36%	4	16%
23	92%	18	72%	13	52%	8	32%	3	12%
22	88%	17	68%	12	48%	7	28%	2	8%
21	84%	16	64%	11	44%	6	24%	1	4%

You get 5 points added to your total score if you successfully complete problem 14 and the final problem.