

Name _____

Student ID # _____

Class Section _____

Instructor _____

Math 1030
Summer 2007

EXAM 1

Dept. Use Only Exam Scores		
Problem	Points	Score
1.	20	
2.	20	
3.	20	
4.	20	
5.	20	
	TOTAL	

Show all your work and make sure you justify all your answers.

2. Suppose two cars are 200 miles apart and are driving towards each other in a straight line. Suppose that one car travels at a rate of 15 miles an hour and the other car travels at a rate of 45 miles an hour. Now suppose that there is a super fly with the ability to travel at a speed of 100 miles an hour. If the super fly starts at one car and travels back and fourth between the two cars until the cars collide what is the total distance the fly travels?

6. Perform the following conversions. Do one of the two problems clearly indicate which problems you want graded otherwise I reserve the right to give you a zero score.

(a) (5 points) Convert 20 inches to feet, yards, meters, and kilometers.

(b) (5 points) Convert 375 pounds to ounces, grams, and kilograms.

7. suppose your boss says that he/she must cut wages by 10 percent or make cutbacks, but to quell the employees complaints your boss tells you that after one year he/she will raise your salary by 10

8. Suppose that you want to buy a mercedes which costs 50,000 dollars, and are also considering bying a 1968 mustang with sun roof in perfect condition which costs 17,000 dollars. Although the choice is clear which car you should by how much more is the mercedes than the mustang?
9. Supoose that your brother ate twenty percent of the cookies and there are now 32 cookies left how many where there orginally?
10. Suppose you want to travel to Europe in 5 years and the trip will cost you 10,000. How must must you invest in an account that pays an APR of 5 percent so that you will have the 10,000 in 5 years if it's compounded annually, and every 4 mounths?

11. Suppose when you were 7 years old you put 2500 in an account that pays an APR of 6 percent. How much money will you have when you are 27 if it's compounded annually, and every 6 months?

12. Suppose you invest 1000 dollars a year into an account that compounds once a year with an APR of 7 percent how much money will you have in 10 years? How about 15 years?

13. How much must you invest each year in an account paying an APR of 6 percent that compounds each year so that you will have 10,000 dollars in 8 years?

14. Julian's math company at sells shares at a price of 20 dollars a share, and 5 years later it sells for a price of 100 dollars a share. Find total and annual returns on the investment.