GOLDEN STATE BAPTIST COLLEGE GENERAL MATHEMATICS PLACEMENT TEST

Arithmetic

1. What is the sum of sixteen thousand nine; twenty thousand eight hundred six; forty-two; and five hundred five?

2.	59,0077,0247,100 $+$ 108
3.	45.00 - 4.76
4.	8.41 <u>x 101</u>
5.	1.25)8.25 =
6.	4 divided by .005 =
7.	What number multiplied by 8 gives you 96?

- 8. If a train travels at an average speed of 60 miles per hour, how far has it traveled in 14 hours?
- 9. If a rope is 288 inches long, how many yards long is that rope?
- 10. A bus traveling at 50 mph reaches its destination in 3 ¹/₂ hours, how far has it gone?

Fractions, Decimals, and Percents

- Convert the fraction into a decimal (up to 3 decimal places): 5/8 =11. 12. Convert the decimal into a fraction and reduce: 0.6 =Add the fractions and reduce: $5\frac{1}{8} + 2\frac{3}{4} =$ 13. Subtract fractions and reduce: $13\frac{7}{12} - 5\frac{2}{3} =$ _____ 14. Multiply fractions and reduce: $3\frac{1}{5} \ge 7\frac{1}{2} =$ 15. Divide fractions and reduce: $1\frac{1}{4} \div \frac{3}{4} =$ _____ 16. How many strips of wood 3/8 of an inch wide can be sawed off a 4 foot piece of wood? 17. Liz bought $12\frac{1}{3}$ yards of material. She used $3\frac{1}{4}$ yards for a skirt and $4\frac{1}{8}$ yards for a dress. 18. How much is left? Convert the fraction to a percent: $\frac{7}{20} =$ 19. 20. Convert .037 into a percent. 21. Convert 5.27 into a percent. 22. Your bill for dinner came to \$30. How much tip would you leave if you tipped 15%? If your pay was cut from \$20 per hour to \$16 per hour by what percentage did your pay 23. decline? What's the simple interest on \$15,000 for 3 years at an annual rate of 6%? 24. All shoes are 30% off at your favorite store. What's the new price for a \$69 pair of shoes? 25.
- 26. Add sales tax of $9\frac{1}{4}\%$ to the answer in #25 and compute the total cost of the shoes.
- 27. What is cheaper, to buy a book on-line for \$19 plus \$5 shipping without tax or to buy it at the local store where it's listed at \$20 plus 9.25 % tax?
- 28. What is the difference between the price online and the price in the store in question #27?

Negative Numbers

29. 11 + (-23) =______ 30. -5 + (-19) =_____ 31. 19 - (-6) =_____ 32. $-5 \ge 7 =$ _____ 33. $-12 \ge (-3) =$ _____ 34. $-24 \div 3 =$ _____ 35. $-28 \div (-7) =$ ____ Algebra 36. Solve for x: -32/x = 4____ 37. Solve for x: 4x - 6 + 22 = 0

Miscellaneous Word Problems

- 38. How much farther would you get if you drove at 65 mph instead of 55 mph for a half hour?
- 39. If you took three exams and scored 93, 66, and 78 points, what would be your average score?
- 40. How many degrees are in a circle?
- 41. What's the length of a rectangular lot with an area of 2,400 sq ft and a width of 40 ft?
- 42. A gallon of gasoline sells for \$2.90 but costs the dealer \$2.54, how much profit will a dealer make if he sells 2000 gallons?

English Units

- 43. What is the ratio of hours to seconds? Please answer in ratio form.
- 44. What is the ratio of quarts to ounces? Please answer in ratio form.
- 45. What is the ratio of quarts to gallons? Please answer in ratio form.
- 46. What is the ratio of inches per yard? Please answer in ratio form.

Squares

47. $14^2 =$ _____ 48. $\left(\frac{1}{3}\right)^2 =$ _____

49. What is the square root of 49?

50. What is the square root of x^2 ?