St. Mary's Dominican High School
Pre-Algebra Summer Worksheet

Dear Student:

This worksheet is for students who will be entering Pre-Algebra in the fall. The Pre-Algebra course is designed to reinforce general mathematics topics that you learned in elementary school as well as to provide a foundation for concepts that will be studied in an Algebra course. Some of the first topics covered in this course involve performing basic Math operations and converting between fractions, decimals, and percents. In order to help you prepare for this course, solve the problems listed below without the use of a calculator, and check your answers with the attached answer key. Although no test will be given at the beginning of the school year, a grade will be given for completing this assignment.

If you have difficulty with any of the concepts, please review them during the summer. You can either use Math books from elementary school, a workbook purchased online or at a school supply center, or internet math help websites such as khanacademy.org

In order to receive full credit for your work, be sure to follow these instructions.

1. Do all work in pencil and on loose-leaf paper.
2. Copy each problem. **SHOW ALL REQUIRED WORK NEATLY AND IN A CLEAR MANNER**. Box your answer. Word problems should be answered in complete sentences.
3. Bring your completed assignment to school on the second day of class.

Your work will be collected and a grade will be given based on **completeness and effort**. Try your best!!! Reviewing these problems will assist you in your transition to high school.

Sincerely,

St. Mary's Dominican Mathematics Department

Round each number to the place value indicated:

1. 23.566; hundredths
2. 0.128; tenths
3. 4,553; tens
4. 23,996; hundreds
5. 0.87; ones

Find each sum, difference, product, or quotient:

6. $1800 + 285$
7. $-8 + (-3)$
8. $9 + (-11)$
9. $10 - (-12)$
10. $22,431 - 13,183$
11. 68×12
12. $\$1951 \div 49$
13. $47.2 + 9.75$
14. $\$7.35 - \$2.16$
15. $45.67 - 2.456$
16. 4.2×29.3
17. $18.8 (5.3)$
18. $7.8 \div 1.2$
19. $54 \div 0.9$

Find each sum, difference, product, or quotient:

20. $\dfrac{5}{18} + \dfrac{11}{18}$

21. $\dfrac{19}{20} - \dfrac{17}{20}$

22. $\dfrac{1}{3} + \dfrac{5}{6}$

23. $\dfrac{11}{12} + \dfrac{3}{4}$

24. $1\dfrac{16}{21} - \dfrac{9}{21}$

25. $\dfrac{7}{8} - \dfrac{5}{6}$

26. $3\dfrac{7}{12} - \dfrac{3}{4}$

27. $5\dfrac{1}{2} - 2\dfrac{2}{3}$

28. $2\dfrac{1}{6} + 5\dfrac{1}{3}$

Write each fraction as a decimal. Use a bar to show a repeating decimal:

29. $\dfrac{1}{5}$ 30. $\dfrac{1}{3}$ 31. $5\dfrac{1}{8}$ 32. $3\dfrac{5}{11}$

Write each percent as a fraction and as a decimal:

Percent		Fraction	Decimal
33.	45%		
34.	0.5%		
35.	120%		

Write each fraction as a percent:

36. $\dfrac{4}{5}$ 37. $\dfrac{9}{4}$

Write each decimal as a percent:

38. 0.27   39. 0.0045   40. 1.25

Answers:

1. 23.57   2. 0.1   3. 4550   4. 24,000   5. 1
6. 2085   7. −11   8. −2   9. 22   10. 9248
11. 816   12. $39.82   13. 56.95   14. $5.19   15. 43.214

16. 123.06   17. 99.64   18. 6.5   19. 60   20. $\dfrac{8}{9}$

21. $\dfrac{1}{10}$ 22. $1\dfrac{1}{6}$ 23. $1\dfrac{2}{3}$ 24. $1\dfrac{1}{3}$ 25. $\dfrac{1}{24}$

26. $2\dfrac{5}{6}$ 27. $2\dfrac{5}{6}$ 28. $7\dfrac{1}{2}$ 29. 0.2   30. $0.\overline{3}$

31. 5.125   32. $3.\overline{45}$ 33. $\dfrac{9}{20}$; 0.45   34. $\dfrac{1}{200}$; 0.005 35. $\dfrac{6}{5}$; 1.2

36. 80%   37. 225%   38. 27%   39. 0.45%   40. 125%