

IMMACULATE CONCEPTION HIGH SCHOOL

ALGEBRA I

SUMMER REVIEW

This packet contains problems that we as a mathematics department feel you should know from previous math courses. It is important that you review these problems as they will appear throughout this course. We feel this will give you an advantage when beginning Algebra I and it will guide your teacher as to what you know and what you may need extra help on.

This packet must be completed prior to the beginning of the school year. It is recommended that you begin working on this review early August so the material stays more current with you. Do your best on these problems, look in old math books or old notes to help guide you. All work must be shown when working each problem. **Calculators are not allowed!** It is very important that you practice your basic skills without a calculator. We will spend the first week of school going over these problems. You will be tested on this material and you will not be allowed to use a calculator. Calculators will be used throughout the course where the teacher finds it necessary. All arithmetic operations must be done mentally.

MUST SHOW ALL WORK

I. Simplify the following.

1.
$$\begin{array}{r} 24,397 \\ +18,274 \\ \hline \end{array}$$

2. $34.6 - 2.53$

3.
$$\begin{array}{r} 2,358 \\ \times 147 \\ \hline \end{array}$$

4. $4862 \div 55$

5. 2.6×0.7

6. $4.95 \div 0.5$

II. Add or subtract the fractions. Change mixed fractions to improper fractions first. Make sure you have a common denominator.

7. $\frac{1}{3} + \frac{4}{9}$

8. $5\frac{1}{3} - 2\frac{1}{4}$

III. Multiply the following fractions. Change mixed fractions to improper fractions first. Multiply the numerators together and multiply the denominators together.

9. $2\frac{1}{3} \times 1\frac{3}{4}$

11. $-7\left(\frac{6}{35}\right)$

IV. Divide the following fractions. To divide fractions: keep the first fraction or number, change division to multiplication, then flip the second fraction and following instructions for multiplying fractions.

10. $\frac{3}{4} \div \frac{4}{5}$

12. $\frac{8}{4} - \frac{4}{5}$

V. Convert the following to a decimal.

13. $\frac{8}{15}$

14. 24%

VI. Convert the following to a fraction.

15. 0.005

16. 65%

VII. Convert the following to a percent.

17. $\frac{37}{100}$

18. 0.38

VIII. Solve the percent problems.

19. 35% of 64 is what number?

20. 14 is 16% of what number?

21. Nineteen is what percent of 76?