



Eagle's Landing  
Christian Academy

PRE-ALGEBRA

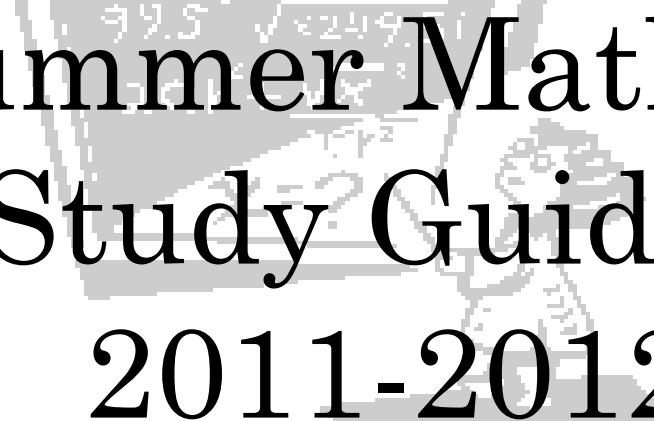
ELCA Middle School Honors Program

Directions:

SHOW ALL WORK ON PAPER AND STAPLE TO THIS PACKET. THIS PACKET IS DUE ON THE FIRST DAY BACK FOR THE 2011 – 2012 SCHOOL YEAR!

I look forward to meeting you all and am excited about this upcoming school year!

Mrs. Green



# Summer Math Study Guide 2011-2012

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Name and homeroom

Perform the indicated operations without using a calculator.

1. \_\_\_\_\_  $45,879 + 21,786$
2. \_\_\_\_\_  $327 + 428 + 569 + 787 + 209$
3. \_\_\_\_\_  $2003 + 149 + 58 + 3426$
4. \_\_\_\_\_  $6080 - 3059$
5. \_\_\_\_\_  $8001 - 6945$
6. \_\_\_\_\_  $489 \cdot 340$
7. \_\_\_\_\_  $7080 \cdot 160$
8. \_\_\_\_\_  $480(8007)$
9. \_\_\_\_\_  $302(4060)$
10. \_\_\_\_\_  $7273 / 9$
11. \_\_\_\_\_  $5,622,606 / 803$
12. \_\_\_\_\_  $4899 / 48$

Solve each story problem.

- \_\_\_\_\_ 13. You wrote checks of \$46, \$78, and \$32. Your balance before that was \$276. What is your new balance?
- \_\_\_\_\_ 14. Playing golf for an hour burns 133 calories. How many calories are burned in 6 hours?
- \_\_\_\_\_ 15. The computer reading on a copy machine is 11,543 before Adam makes copies. After he is finished, the reading is 11,725. How many copies did he make?
- \_\_\_\_\_ 16. A family bought a house for \$107,900. They spent \$16,500 for an extra room. Then they sold the house for \$137,780. How much profit did they make on the house?

In this section use order of operations to simplify each expression.

\_\_\_\_\_ 17.  $3 \cdot (2 + 8)^2 - 5 \cdot (4 - 2)^2$

\_\_\_\_\_ 18.  $3^3 + 8^2 / 2^2$

\_\_\_\_\_ 19.  $2000 - 10 \cdot 6 - (4 + 5 \cdot 6)$

\_\_\_\_\_ 20.  $6 \cdot 12 - (7 + 3) / 5 - (6 - 4)$

\_\_\_\_\_ 21.  $8 \cdot 24 - (18 + 2) / 4 - (9 - 4)$

\_\_\_\_\_ 22.  $1000 / 25 - (18 + 5)$

*Write the prime factorization of each number using exponents.*

\_\_\_\_\_ 23.. 169

\_\_\_\_\_ 24. 110

\_\_\_\_\_ 25 156

\_\_\_\_\_ 26. 140

*In this section simplify to lowest terms*

\_\_\_\_\_ 27.  $80/120$

\_\_\_\_\_ 28.  $24/8$

\_\_\_\_\_ 29.  $16/48$

*Add or subtract and simplify*

\_\_\_\_\_ 30.  $2/3 - 1/4$

\_\_\_\_\_ 31.  $17/26 - 11/65$

\_\_\_\_\_ 32.  $1 \frac{7}{10} + 6 \frac{3}{4}$

\_\_\_\_\_ 33.  $14 + 7 \frac{5}{12}$

\_\_\_\_\_ 34.  $14 - 7 \frac{5}{12}$

\_\_\_\_\_ 35.  $16 \frac{1}{4} - 12 \frac{3}{8}$

\_\_\_\_\_ 36.  $12 \frac{7}{15} - 7$

\_\_\_\_\_ 37.  $12 \frac{7}{15} + 7$

\_\_\_\_\_ 38.  $2 \frac{1}{2} + 3 \frac{2}{5} + 4 \frac{1}{4} + 5 \frac{3}{10}$

*Multiply or divide and simplify*

\_\_\_\_\_ 39.  $\frac{3}{8} \cdot \frac{7}{15}$

\_\_\_\_\_ 40.  $\frac{3}{8} \div \frac{7}{15}$

\_\_\_\_\_ 41.  $\frac{2}{9} \cdot 8$

\_\_\_\_\_ 42.  $\frac{2}{9} \div 8$

\_\_\_\_\_ 43.  $8 \div \frac{2}{9}$

\_\_\_\_\_ 44.  $2 \frac{5}{6} \div 1 \frac{2}{5}$

\_\_\_\_\_ 45.  $2 \frac{5}{6} \cdot 1 \frac{2}{5}$

\_\_\_\_\_ 46.  $6 \frac{1}{12} \div 2 \frac{1}{3}$

\_\_\_\_\_ 47.  $6 \frac{1}{12} \cdot 2 \frac{1}{3}$

*Change each fraction to a decimal.*

\_\_\_\_\_ 48.  $2/25$

\_\_\_\_\_ 49.  $405/12$

\_\_\_\_\_ 50.  $7/8$

*Change each decimal to a fraction.*

\_\_\_\_\_ 51.  $.625$

\_\_\_\_\_ 52.  $.0003$

*Perform the indicated operations without using a calculator. Express answers as a fraction in simplest form.*

\_\_\_\_\_ 53.  $- 8 + 29$

\_\_\_\_\_ 54.  $18 \times - 29$

\_\_\_\_\_ 55.  $90 - (- 809)$

\_\_\_\_\_ 56.  $45 \div -3$

\_\_\_\_\_ 57.  $- 101 - 12$

\_\_\_\_\_ 58.  $108 \times - 89$

\_\_\_\_\_ 59.  $33 \times - 67$

\_\_\_\_\_ 60.  $43 \div - 16$

\_\_\_\_\_ 61.  $- 768 \div - 16$

\_\_\_\_\_ 62.  $125 \div - 5$

\_\_\_\_\_ 63.  $- 100 \times -25$

\_\_\_\_\_ 64.  $- 25 - - 9$

*Perform the indicated operation*

\_\_\_\_\_ 65.  $3 - (-5)$

\_\_\_\_\_ 66.  $3 + (-5)$

\_\_\_\_\_ 67.  $3 \cdot (-5)$

\_\_\_\_\_ 68.  $(-3) \cdot (-5)$

\_\_\_\_\_ 69.  $(-30)/5$

\_\_\_\_\_ 70.  $(-30)/(-5)$

*Round each number to the place indicated.*

\_\_\_\_\_ 71. 0.325 Round to the nearest tenth.

\_\_\_\_\_ 72. 0.2456 Round to the nearest thousandth.

\_\_\_\_\_ 73. 7.0375 Round to the nearest hundredth.

\_\_\_\_\_ 74. 17.999 Round to the nearest tenth.

*Express each fraction as a percent.*

\_\_\_\_\_ 75.  $9/10$

\_\_\_\_\_ 76.  $9/20$

\_\_\_\_\_ 77.  $90/40$

\_\_\_\_\_ 78.  $7/8$

*Express each percent as a fraction in simplest form.*

\_\_\_\_\_ 79. 30%

\_\_\_\_\_ 80.  $22\frac{1}{8}\%$

\_\_\_\_\_ 81. 4.5%

\_\_\_\_\_ 82. 1%