# **Algebraic Topics Summer Packet**

# **Student Directions**

### (No Calculators allowed)

This packet is designed to evaluate some of the skills deemed necessary for success in a high school mathematics. Try your best on every problem. Show all work in the space provided below each problem. Remember to completely simplify your answers. Write your final answer in the appropriately numbered box on the right side of the page.

Dear Math student,

We are very excited to have you in Math next year. In anticipation for next year's class, enclosed you will find a review packet to complete over the summer. These are topics that we expect you to know before class begins. If you are struggling with the material attached is a list of websites that are excellent resources to take advantage of. Some of these websites includes videos and examples to assist you. Please show your work in a NEAT and ORGANIZED manner. A test will be given pertaining to the review material within the first week of class. Good luck! We look forward to seeing you in the fall.

Happy Summer! -RTMS Mathematics Department

# Helpful Websites

- 1. www.khanacademy.org
- 2. http://www.algebrahelp.com/
- 3. <u>http://www.math.com/</u>
- 4. <u>http://www.purplemath.com/</u>
- 5. <u>http://www.aaamath.com/</u>
- 6. <u>http://www.coolmath.com/</u>

#### ANSWERS



- 2. Write the numeral that represents three hundred four million, seventy .
- 3. Name the digit in the millions place in 427,615,890.
- 4. 259 + 531=

5. 726 + 92 + 568 + 9 + 243 =

6. 7652 - 487 =

- 7.  $79 \times 32 =$
- 8. 509 × 324 =

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	

9. 4165÷17

#### ANSWERS

9.  
10. 
$$\frac{5}{3} \div \frac{20}{33} =$$
  
11.  
11.  $\frac{2}{9} \div \frac{4}{9} =$   
12.  $\frac{5}{8} \div \frac{7}{24} =$   
13.  
14. Find the least common denominator of  $\frac{9}{24}$  and  $\frac{7}{8}$ .

15. 
$$\frac{2}{9} \times \frac{6}{7} =$$

## ANSWERS

16. $9 \div \frac{5}{9} =$	15.
	16.
17. Write $\frac{7}{8}$ as a decimal.	17.
18. Write 0.12 as a reduced fraction.	18.
19. Solve for x: $\frac{x}{24} = \frac{11}{4}$	19.
20. Which number is the least?	20.
a. 5.1732	
b. 5.1273	

5

c. 5.2173d. 5.1237

### ANSWERS



26. List all the factor pairs of 40

27. Write the prime factorization of 72.

# ANSWERS



33. How many weeks are in 2.5 years?

# 34. $3\frac{1}{4} - 2\frac{5}{6} =$

35. Solve for n: 
$$3 = \frac{n}{5}$$

36. What 2 whole numbers is  $\frac{17}{18}$  located between?

37. What is the greatest common factor of 24 and 72?

38. What is the least common multiple of 12 and 16?

39. Rewrite  $7\frac{3}{8}$  as an improper fraction.

ANSWERS