



Pre-Algebra

Lions on the Loose

Summer Math Review Packet

(For Students that have Completed Pre-Algebra)



St. Luke Middle School
Lions on the Loose
Summer Math Review Packet



Dear St. Luke Student,

Your middle school math teacher is looking forward to teaching you many math concepts next school year. In preparation for a successful year, you must study the objectives and complete problems included in this packet. The objectives in the packet are those which you should have mastered in your 2008-2009 math class. We encourage you to work each problem with great effort and perhaps study your multiplication tables on a regular basis this summer.

The following procedures should be used for completing your summer math packet:

1. Complete all **even numbered problems** for each of the objectives on loose-leaf notebook paper using pencil. Your work should be organized by objective and placed in a paper notebook with brads and pockets. Please place this summer packet in the pocket of the notebook. Make sure your name is written in ink on both the folder and the math packet.
2. Show all of your work for each even numbered problem. Draw a box or a circle around your final answer. Make an answer column on the right hand side of your notebook paper with your final answers to the assigned problems.
3. Your notebook will be graded for effort and will serve as a significant homework grade(s) for your math class for the first nine week grading period. There will be a grade deduction for incomplete work. After a week or two of reviewing the problems in the packet, a multiple choice assessment drawn directly from the assigned (even numbered) problems will be given. This assessment will serve as a test grade for the first nine week grading period.
4. Your summer math review packet is due on St. Luke's registration day, August 6, 2009. The same due date as your other Lions on the Loose assignments.

Should you have any questions regarding your math packet, please email Mrs. Pound at bpound@stlukeum.com (7th and 8th grade Pre-Algebra and Math Course Two teacher).

Sincerely,

The St. Luke Middle School Math Teachers

Math Packet Sample Work Page – Notebook Paper

Name

Objective Title – example: 1-4 Order of Operations

Answers

2.

4.

6.

8.

10.

Show your work
here.

Pre-Algebra Summer Math Review Packet

Table of Contents

- 1-2 Numbers and Expressions
- 1-5 Variables and Equations
- 2-1 Integers and Absolute Value
- 2-2 Adding Integers
- 2-3 Subtracting Integers
- 2-4 Multiplying Integers
- 2-5 Dividing Integers
- 2-6 The Coordinate System
- 3-1 The Distributive Property
- 3-2 Simplifying Algebraic Expressions
- 3-3 Solving Equations by Adding or Subtracting
- 3-4 Solving Equations by Multiplying or Dividing
- 3-5 Solving Two Step Equations
- 4-2 Powers and Exponents
- 4-6 Multiplying and Dividing Monomials
- 4-7 Negative Exponents
- 6-2 Using Proportions
- 6-5 Using the Percent Proportion

Selected Answers

Your problems and answers on loose-leaf notebook paper.

Selected Answers

1-2 Numbers and Expressions

1. 33

3. 16

5. 6

9. 26

13. 0

17. $20 - 11$

19. $64 \div 8$

1-5 Variables and Equations

1. 18

5. 11

9. 11

13. Let $n =$ the number; $7n = 56$; 8

15. Let $n =$ the number; $n - 4 = 12$; 16

2-1 Integers and Absolute Value

1. $>$

5. $<$

9. $>$

11. $>$

13. 6

15. 12

17. 2

2-2 Adding Integers

1. 3

5. -3

9. 0

13. -30

17. -16

21. -4

25. -11

2-3 Subtracting Integers

1. -7

5. -17

9. -9

13. -18

17. 40

21. -23

2-4 Multiplying Integers

1. -35

5. -55

9. -36

13. 80

17. -72

21. -96

2-5 Dividing Integers

1. -8

5. -10

9. 5

13. -12

17. -9

2-6 The Coordinate System

1. I

3. none

5. none

7. II

11. IV

3-1 The Distributive Property

1. $3 \times 8 + 3 \times 2$; 30

5. $17 \times 3 + (-4) \times 3$; 39

9. $-2c + (-2)(7)$; $-2c - 14$

3-2 Simplifying Algebraic Expressions

1. terms: 2, 6a, 4a like terms: 6a and 4a coefficients: 6 and 4 constant: 2

5. terms: 3w, 4u, -6 like terms: none coefficients: 3 and 4 constant: -6

9. 13y

13. $7d + 1$

3-3 Solving Equations by Adding or Subtracting

1. -3

5. 2

9. -5

11. 3

3-4 Solving Equations by Multiplying or Dividing

1. -5

5. 0

9. -4

11. 5

3-5 Solving Two-Step Equations

1. 1

5. 5

7. -3

11. 23

15. 36

19. -64

23. -4

4-2 Powers and Exponents

1. 5^7

3. d^4

5. $(z-4)^2$

7. 243

9. 0

11. 25

4-6 Multiplying and Dividing Monomials

1. 4^{13}

5. $35h^4$

9. $(-12)^0$ or 1

13. $42u^{11}$

15. $-20m^9$

17. 6^6

4-7 Negative Exponents

1. $\frac{1}{64}$

5. 2^{-2}

7. 5^{-2}

9. $\frac{1}{36}$

11. $\frac{1}{81}$

6-2 Using Proportions

1. $x = 12$

5. $a = 30$

9. $g = 360$

13. $r = 2.25$

17. $c = 2.6$

21. $v = 10.45$

6-5 Using the Percent Proportion

1. 92.3%

3. 254.5%

5. 831.6

7. 5.8

