

Joseph J Greenberg Elementary School

600 Sharon Lane

Philadelphia PA 19115

215-961-2002

June 9, 2015

Dear Parents/Guardians,

Congratulations on the completion of your son's/daughter's 7th grade year. My name is Mrs. Pieces and I will be your child's math teacher for 8th grade. As your child prepares for next year, it is important he/she maintains the skills necessary to be successful. I have prepared a math packet for the students to complete. This will enhance and strengthen their skill.

This packet will be checked on the first day of school and will count as a grade. Please complete the packet in its entirety. Please do not leave any questions blank and be sure to show all work!

Please sign and return the form below. I will keep these for my records to ensure all packets are returned. I look forward to a strong academic year. Have a wonderful summer and thank you for your cooperation.

Sincerely,

Mrs. Pieces

I understand this packet is to be completed to its entirety and brought to school on the first day.

Student's name _____

Parent's signature _____

d) Add and subtract the following rational numbers

13.) $1\frac{5}{9} + 2\frac{2}{3}$	14.) $\frac{4}{7} - \frac{1}{2}$	15.) $\frac{2}{5} - \frac{5}{7}$
------------------------------------	----------------------------------	----------------------------------

e) Add the following integers

16.) $-6 + (-3)$	17.) $-8 + 10$	18.) $-3 + 10 + (-6)$
19.) $-61 + (-39)$	20.) $-74 + 36$	21.) $-13 + (-8) + 12$

f) Subtract the following integers (See lesson-remember to add the opposite!)

22.) $-6 - 3$	23.) $-8 - (-10)$	24.) $13 - 21$
---------------	-------------------	----------------

f) Subtract the following integers (See lesson-remember to add the opposite!)

25.) $7 - 16$	26.) $-9 - 4$	27.) $-6 - (-5)$

g) Multiply and divide the following rational numbers

28.) $(-6)(-8)$	29.) $(3.28)(4.1)$	30.) $\left(\frac{2}{3}\right)\left(\frac{3}{7}\right)$
31.) $(-12) \div (-2)$	32.) $2 \div 12$	33.) $\frac{2}{3} \div \frac{3}{7}$

h) Evaluate each expression; make sure to follow the order of operations (PEMDAS)

34.) $16 - 12 \div 4$	35.) $5 - 6 \cdot 2 \div 3$	36.) $2^3 - 32 \div 8 + 5$

37.) $(10 + 5) \div 3 + 5^2$	38.) $4(9) - 36 \div 3$	39.) $25 + 2 \cdot 8 \div 4$

i) Evaluate the following expressions if $a = -6$, $b = 4$, and $c = -5$.

40.) $a - 8$	41.) $b - a - c$	42.) $3c + b$
43.) $a(b + c)$	44.) $c^2 - 5b$	45.) $\frac{b+6}{c}$

PART TWO: Algebraic Expressions

a) Translate each phrase into a variable expression or equation.

46.) Four more than one third a number.	47.) Five less than three times a number
48.) The product of three and a number is 21.	49.) The sum of seven and three times a number is twelve.

b) Simplify the following expressions completely. Remember to distribute to both terms!

50.) $9(x + 3)$	51.) $4(9 + x)$	52.) $6(7d - a)$
53.) $-8(3m - 2)$	54.) $3(4 - 7x)$	55.) $-1(x - 4)$

c) Simplify the following expressions completely. Remember to combine like terms!

56.) $-x + 6 + 5x - 3$	57.) $4 - x - 7 - 5x$	58.) $x + 5 - x + 2$
59.) $4 + x - 6$	60.) $3x + 12 - x$	61.) $x + 5x$

For problems 74-79, you are solving two-step equations. Remember to use the reverse order of operations (you must add and subtract before multiplying or dividing!)

74.) $4x + 7 = 35$	75.) $17 + 6p = -73$	76.) $\frac{v}{5} - 2 = -6$
77.) $\frac{3}{7}x = -4\frac{2}{7}$	78.) $3y - 4 = 14$	79.) $\frac{1}{4}a - 2 = -3$

PART FOUR: Word Problems

Write an equation based on the facts of each problem, then solve. Show ALL work!

80.) Five more than a number is fifty-seven. What is the number?
81.) Yolanda paid \$108 for 6 tickets to a hockey game. How much did each ticket cost?
82.) You clean a community park for 6.5 hours. You earn \$42.25. How much do you earn per hour?

$$13) 37 = -3 + 5(x + 6)$$

$$14) -13 = 5(1 + 4m) - 2m$$

$$15) 4(-x + 4) = 12$$

$$16) -2 = -(n - 8)$$

$$17) -6(1 - 5v) = 54$$

$$18) 8 = 8v - 4(v + 8)$$

$$19) 10(1 + 3b) = -20$$

$$20) -5n - 8(1 + 7n) = -8$$

$$21) 8(4k - 4) = -5k - 32$$

$$22) -8(-8x - 6) = -6x - 22$$

$$23) 8(1 + 5x) + 5 = 13 + 5x$$

$$24) -11 - 5a = 6(5a + 4)$$