Name:_____   Date:_____

Math 8 Section 1.6a Order of Operations:

1. Evaluate each of the following operations. Remember the order of the operations. Show all your steps:

a) $2+5\times4$	b) $-5-8\div2$	c) $8\times2+6$
d) $-9\times7-20$	e) $8\div2+6$	f) $12-6\times(-3)$
g) $3+11\times4-21$	h) $-6+24\div8-2$	i) $-12-18\div9-6$
j) $(7+2)\times4-5+12\div2$	k) $11\times(3+4)-12\times2$	L) $-20\div(12+8)-15\div5+1$
m) $2(12\div3+4)+12\div4$	n) $(-8\times2+12\div3)\div4\times3$	p) $12\div4\times3\div6\times8\div4$
Q) $(12+2)\times4-(6\times3\div2+12)$	r) $4+(-3-2)\times(14-2)+9\times(6-2)$	s) $3(1-(5\times(5+2)+1)-2)$

2. What operations can be placed into the boxes so that the expression will be true:

a) $12 \;\square\; 2 \;\square\; 3 \;\square\; 1 = 17$	b) $9 \;\square\; 14 \;\square\; 2 \;\square\; 3 = -12$	c) $9 \;\square\; 4 \;\square\; 44 \;\square\; 2 = 14$

3. Indicate the all mistakes in each of the following examples shown below. There are at least one mistake in each example:

a) Julie's Work:	b) Tim's work:	c) Tracy's Work:
$15 \div 3 + 2 - 7 \times 4$	$-27 + 9 \times 2 - 6$	$-3 - 4 - 5 \times 2 + 2 \div (-1)$
$= 15 \div 5 - 28$	$= -27 + 9 \times (-4)$	$= -7 - 10 + -2$
$= 3 - 28$	$= -27 + (-36)$	$= -15$
$= -25$	$= 63$	

4. Where can you insert a pair of brackets into the following expression so that the value can be maximized?

$$3 + 6 \times 9 + 2 - 5 \times 4$$

5. Jason wrote six math exams and got the following scores: 87%, 74%, 65%, 92%, 78%, and 99%. What is the average score for his six exams?

6. Thomas plays on the school basketball team. He gets 3 points if he scores a 3pointer, 2 points for fields-goals, and 1 point for each foul shot made. He scored 4 3pointers, 6 fg, and 9 free throws. How many points did he get?

7. A certain small factory employs 98 workers. Of these 10 receive a wage of $200 per day and the rest receive $100 per day. To the management, a week is equal to 6 working days. How much does the factory pay out for each week?

8. The final grade in a course is the average of the scores on 10 tests. Each test is graded on a scale of zero to 100 inclusive. A student's average on the first 7 tests was 84. The final grade of the student in the course was 63. What was the average student grade on the last 3 tests?