Name _____   Date _____
MCAS Open Response – Order of Operations #1

Ms. Culjak is giving her students their scores on the last math test. She provides each student with an **expression** that has a <u>value</u> equal to the <u>number of points</u> the student scored on the test.

Leo <u>must score</u> a **minimum** of 80 points on the test to maintain a B in the class. The **expression** below *represents* the <u>number of points</u> Leo scored on the test:

$$4 \cdot 6 \div 3 + 5(2 - 6)^2$$

a) **Did** Leo <u>score enough points</u> to maintain a B in the class? *Show your work or explain how you got your answer.*

Work:	Choose one ↓↓ Choose one ↓↓
	Yes/No, Leo did/did not score enough points because _____ _____ _____ _____ _____

Gerard **estimates** that he scored 90 <u>points</u> on the test. The **expression** below *represents* the actual <u>number of points</u> Gerard scored on the test;

$$9 + 8[4 + 2(3 - 5)^2] - 3 \cdot 4$$

b) **What** is the **<u>difference</u>** between Gerard's **estimate** and the actual <u>number of points</u> he scored on the test? *Show or explain how you got your answer.*

Work:	The difference is _____. I got this by _____ _____ _____ _____ _____

Tia was given the **expression** below to represent the <u>number of points</u> she scored on the test:

$$\frac{26 - 10 \cdot 10 - 8}{8 \div 4}$$

c) Tia claims that the **expression <u>cannot</u> *represent*** the <u>number of points</u> she scored on the test. **Explain** why Tia's claim is <u>correct</u>.

Work:	
	Tia's claim is correct because _____ _____ _____ _____ _____ _____

Ms. Culjak confirms that Tia's claim is <u>correct</u>. She says Tia's **expression** is missing one <u>set of parentheses</u>. Ms. Culjak also says that *Tia scored 76 points on the test.*

d) **Copy** Tia's **expression** and <u>**insert**</u> one <u>set of parentheses</u> in the **expression** so that the value of the **expression** is 76.

Tia's **expression** with one <u>set of parentheses</u> that **equals** 76: