

Name _____

Date _____

1. Draw a model. Then, write the numerical expressions.

a. The sum of 21 and 4, doubled	b. 5 times the sum of 7 and 23
c. 2 times the difference between 49.5 and 37.5	d. The sum of 3 fifteens and 4 twos
e. The difference between 9 thirty-sevens and 8 thirty-sevens	f. Triple the sum of 45 and 55

2. Write the numerical expressions in words. Then, solve.

Expression	Words	The Value of the Expression
a. $10 \times (2.5 + 13.5)$		
b. $(98 - 78) \times 11$		
$(71 + 29) \times 26$		
c. $(50 \times 2) + (15 \times 2)$		

3. Compare the two expressions using $>$, $<$, or $=$. In the space beneath each pair of expressions, explain how you can compare without calculating. Draw a model if it helps you.

a. $93 \times (40 + 2)$	○	$(40 + 2) \times 39$
b. 61×25	○	60 twenty-fives minus 1 twenty-five

4. Larry claims that $(14 + 12) \times (8 + 12)$ and $(14 \times 12) + (8 \times 12)$ are equivalent because they have the same digits and the same operations.

a. Is Larry correct? Explain your thinking.

b. Which expression is greater? How much greater?

Answer Key

1.
 - a. Accurate model drawn; $(21 + 4) \times 2$
 - b. Accurate model drawn; $5 \times (7 + 23)$
 - c. Accurate model drawn; $2 \times (49.5 - 37.5)$
 - d. Accurate model drawn; $3 \times 15 + 4 \times 2$
 - e. Accurate model drawn; $9 \times 37 - 8 \times 37$
 - f. Accurate model drawn; $3 \times (45 + 55)$
2.
 - a. Answers will vary; 160
 - b. Answers will vary; 220
 - c. Answers will vary; 2,600
 - d. Answers will vary; 130
3.
 - a. $>$; answers will vary.
 - b. $>$; answers will vary.
4.
 - a. No; answers will vary.
 - b. $(14 + 12) \times (8 + 12)$; 256