Name $\qquad$ Date $\qquad$

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

| a. The sum of 8 and 7 , doubled | b. 4 times the sum of 14 and 26 |
| :--- | :--- |
| c. 3 times the difference between 37.5 and 24.5 | d. The sum of 3 sixteens and 2 nines |

2. Write the numerical expressions in words.

| Expression | Words | The Value of the <br> Expression |
| :--- | :--- | :--- |
| a. $12 \times(5+25)$ |  |  |
| b. $\quad(62-12) \times 11$ |  |  |
| c. $\quad(45+55) \times 23$ |  |  |
| d. $\quad(30 \times 2)+(8 \times 2)$ |  |  |

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. $24 \times(20+5)$ | $(20+5) \times 12$ |  |
| :--- | :--- | :--- | :--- |
| b. $18 \times 27$ |  |  |
| c. $19 \times 9$ |  |  |

4. Mr. Huynh wrote the sum of 7 fifteens and 38 fifteens on the board.
a. Draw a model and write the correct expression.
5. Two students wrote the following numerical expressions.

Angeline: $(7+15) \times(38+15)$
MeiLing: $15 \times(7+38)$
Are the students' answers equivalent to your answer in Problem 4(a)? Explain your answer.
6. A box contains 24 oranges. Mr. Lee ordered 8 boxes for his store and 12 boxes for his restaurant. a. Write an expression to show how to find the total number of oranges ordered.
b. Next week, Mr. Lee will both double the number of boxes he orders. Write a new expression to represent the number of oranges in next week's order.
c. Evaluate your expression from Part (b) to find the total number of oranges ordered in both weeks.

Name $\qquad$ Date $\qquad$

1. Draw a model then write the numerical expressions.

| a. The difference between 8 forty-sevens and |  |
| :--- | :--- |
| 7 forty-sevens | b. 6 times the sum of 12 and 8 |
|  |  |

2. Compare the two expressions using $>,<$, or $=$.

| $62 \times(70+8)$ | $(70+8) \times 26$ |
| :--- | :--- | :--- |

Name $\qquad$ Date $\qquad$

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 |

2. Write the numerical expressions in words.

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

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. $93 \times(40+2)$ |  |  |
| :--- | :--- | :--- |
|  |  |  |
| b. $61 \times 25$ |  |  |

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?
