Training Header Sheet with Change Log Form

Kentucky Math Operational

Grade 5/Math
3 Times the Sum of 5 and 8
MA0520109

Anchor Set

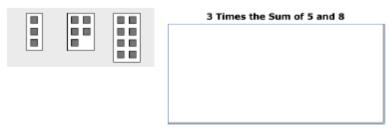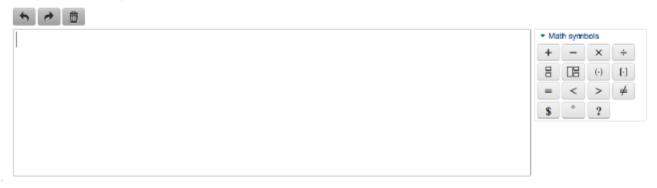| Date	Comments	Version
2.2022	Initial Operational Training Set	Set A

Prompt

Part A

Create a model that can be used to represent the value of 3 times the sum of 5 and 8.

Drag and drop the appropriate number of groupings into the box to create your model. Each grouping may be used once, more than once, or not at all.

3 Times the Sum of 5 and 8

Part B

Write an expression that can be used to represent "3 times the sum of 5 and 8." Explain how your expression compares to the model you created in Part A.

Enter your expression and your explanation in the space provided.

▾ Math symbols

+	−	×	÷
=	<	>	≠
$	°	?

Rubric

<table>
<tr><th colspan="2" align="center">Rubric</th></tr>
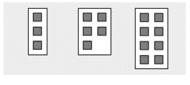<tr><td colspan="2">The total item score is the sum of the points awarded in the Machine-scored and Human-scored parts.</td></tr>
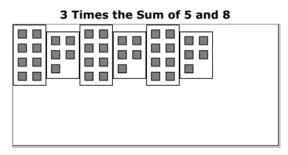<tr><td colspan="2" align="center">Machine Scoring</td></tr>
<tr><td>Score Point 1</td><td>Part A

Student response is 3 groups of 8 and 3 groups of 5 shown in the box.</td></tr>
<tr><td>Score Point 0</td><td>Student response is incorrect.</td></tr>
<tr><td colspan="2" align="center">Human Scoring</td></tr>
<tr><td>Score Point 1</td><td>Student demonstrates a complete understanding of writing a simple expression with numbers and interpreting the numerical expression without evaluating them.</td></tr>
<tr><td>Score Point 0</td><td>Student response is insufficient to demonstrate a grade-appropriate, relevant understanding of the task.</td></tr>
<tr><td>Score Point</td><td>Part B

Score 1 point: Human-scored
Correct expression with complete explanation
Score 0.5 point:
Correct expression OR
Complete explanation</td></tr>
<tr><td>Correct Answer</td><td>Part B

The expression 3(5 + 8) represents 3 times the sum of 5 and 8.

Both my expression and my model shows that there are 3 groups of 8 and 3 groups of 5, which is the same as 3 groups of 13.

Note: Other correct explanations are acceptable.</td></tr>
</table>

Part A

Create a model that can be used to represent the value of 3 times the sum of 5 and 8.

Drag and drop the appropriate number of groupings into the box to create your model. Each grouping may be used once, more than once, or not at all.

3 Times the Sum of 5 and 8

Part B

Write an expression that can be used to represent "3 times the sum of 5 and 8." Explain how your expression compares to the model you created in Part A.

Enter your expression and your explanation in the space provided.

Expression: $3 \times (5 + 8)$

My expression $[3 \times (5 + 8)]$ compares to the model in part A in how the model shows 5, then 8, 3 times. If you were to solve it, it would be 39.
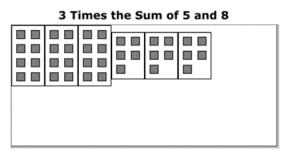
$3 \times (5 + 8)$

$3 \times 13 = 39$

If you were to add everything in the model, you would also get 39. Although you would be adding, not multiplying, multiplication IS only a shorter way of adding reapeatedly. So all in all, if you were to solve these equasions they would be exactly the same even if they are expressed differently.

Part A

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3 Times the Sum of 5 and 8

Part B

Write an expression that can be used to represent "3 times the sum of 5 and 8." Explain how your expression compares to the model you created in Part A.

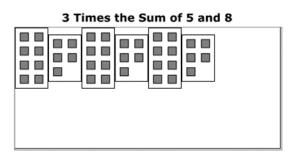Enter your expression and your explanation in the space provided.

$3 \times (5 + 8)$ My expression compares to the modle I created in part A by I put eight three times and five three times.

Part A

Create a model that can be used to represent the value of 3 times the sum of 5 and 8.

Drag and drop the appropriate number of groupings into the box to create your model. Each grouping may be used once, more than once, or not at all.

3 Times the Sum of 5 and 8

Part B

Write an expression that can be used to represent "3 times the sum of 5 and 8." Explain how your expression compares to the model you created in Part A.

Enter your expression and your explanation in the space provided.

$3 \times (5 + 8)$

My expression compares to the model I used in Part A because $5 + 8 = 13$. By putting 3 groupings of 13, I showed that $3 \times (5 + 8)$ equals 39.
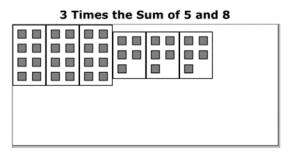
Part A

Create a model that can be used to represent the value of 3 times the sum of 5 and 8.

Drag and drop the appropriate number of groupings into the box to create your model. Each grouping may be used once, more than once, or not at all.

3 Times the Sum of 5 and 8

Part B

Write an expression that can be used to represent "3 times the sum of 5 and 8." Explain how your expression compares to the model you created in Part A.

Enter your expression and your explanation in the space provided.

$3 + 5 \times 3 = 39$

In my model in part A I put 3 eights and 3 fives to show the anwser 39 and in model B I wrote the equation and got 39.
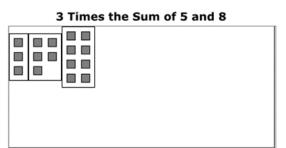
Part A

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3 Times the Sum of 5 and 8

Part B

Write an expression that can be used to represent "3 times the sum of 5 and 8." Explain how your expression compares to the model you created in Part A.

Enter your expression and your explanation in the space provided.

$3 \times (5 + 8)$ This compares to my model because my model showes 1 group of 3 one group of 5 ad one group of 8. That's how my model compares to my expression.
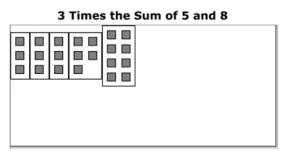
Part A

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Drag and drop the appropriate number of groupings into the box to create your model. Each grouping may be used once, more than once, or not at all.

3 Times the Sum of 5 and 8

Part B

Write an expression that can be used to represent "3 times the sum of 5 and 8." Explain how your expression compares to the model you created in Part A.

Enter your expression and your explanation in the space provided.

$$3 \times 5 + 8$$