

MATH GRADE 3

A. Short Answer (SA) 2 points

Mean: .55

Standard: IB

Strand: Number and Operations
Content Standard: Students will understand numerical concepts and mathematical operations.
Benchmark: Understand the meaning of operations and how they relate to one another.

Mona was given the problem $32 \div 4 = 8$. Write an expression Mona can use to check if the problem is correct and explain why.

B. Rubric

New Mexico Rubric for 2-point Open-Ended Items

Score	Description
2	<p>The student response</p> <ul style="list-style-type: none">• offers a correct solution and is well supported by well-developed and accurate explanations.• gives evidence that an appropriate problem-solving strategy was selected and implemented, but may contain minor errors that do not detract from the overall quality of the student response.• is clearly organized and focused, and shows a mathematical understanding of the task or concept.• contains sufficient work to convey thorough understanding of the problem.
1	<p>The student response</p> <ul style="list-style-type: none">• offers a correct solution with no supporting evidence or explanation.• offers a partially correct answer to the problem.• may contain flaws indicating an incomplete understanding of the task or concept.• may show faulty reasoning leading to weak answers or conclusions.• may demonstrate unclear communication in writing or diagrams.• may demonstrate a poor understanding of relevant mathematical procedure or concepts.
0	<p>The student response</p> <ul style="list-style-type: none">• gives an incorrect response with no work shown.• offers no mathematical understanding of the problem• does not address the problem.

C. Student Responses

SCORE 2

Mona was given the problem $32 \div 4 = 8$. Write an expression Mona can use to check if the problem is correct and explain why.

$8 \times 4 = 32$
you can use this to check your answer because multiplication is the opposite of division.

Mona was given the problem $32 \div 4 = 8$. Write an expression Mona can use to check if the problem is correct and explain why.

Because they are part of a fact family.

$$4 \times 8 = 32$$

Mona was given the problem $32 \div 4 = 8$. Write an expression Mona can use to check if the problem is correct and explain why.

$8 \times 4 = 32$ so you switch that around to make $32 \div 4 = 8$

SCORE 1

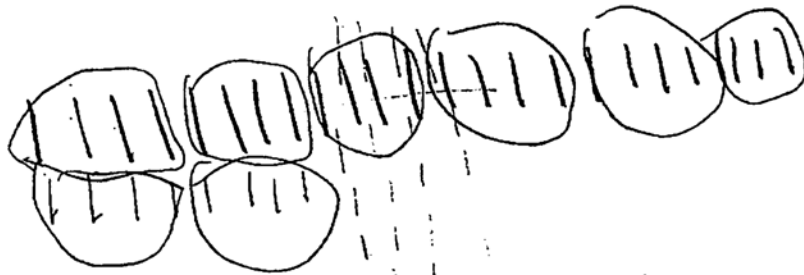
Mona was given the problem $32 \div 4 = 8$. Write an expression Mona can use to check if the problem is correct and explain why.

$$8 \times 4 = 32$$

$$8 + 8 + 8 + 8 = 32$$

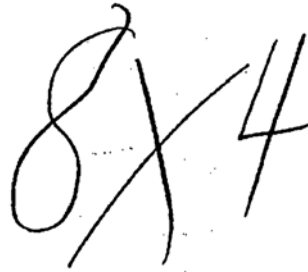
She can use either of these because $32 \div 4 = 8$ is almost the same as 8×4 or $8 + 8 + 8 + 8 = 32$.

Mona was given the problem $32 \div 4 = 8$. Write an expression Mona can use to check if the problem is correct and explain why.



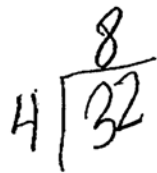
Because all you do is put 32 lines and see how many groups you can make of four

Mona was given the problem $32 \div 4 = 8$. Write an expression Mona can use to check if the problem is correct and explain why.



SCORE 0

Mona was given the problem $32 \div 4 = 8$. Write an expression Mona can use to check if the problem is correct and explain why.



Mona was given the problem $32 \div 4 = 8$. Write an expression Mona can use to check if the problem is correct and explain why.

you can use timetables

Mona was given the problem $32 \div 4 = 8$. Write an expression Mona can use to check if the problem is correct and explain why.

$$32 - 24 = 8$$