Fractured Multiplication *M010 scoring rubric*

Math Domain

☑ Number/Quantity	☐ Shape/Space	☐ Function/Pattern
☐ Chance/Data	☐ Arrangement	

Math Actions (possible weights: 0 through 4)

0 Modeling/Formulating	2 Manipulating/Transforming
3 Inferring/Drawing Conclusions	2 Communicating

Math Big Ideas

☐ Scale	☐ Reference Frame	☑ Representation
☐ Continuity	☐ Boundedness	☐ Invariance/Symmetry
☐ Equivalence	☐ General/Particular	☑ Contradiction
☐ Use of Limits	☐ Approximation	☐ Other

There are nine possible solutions:

19 x 5 = 95

18 x 5 = 90

16 x 6 = 96

15 x 6 = 90

14 x 7 = 98

13 x 7 = 91

12 x 8 = 96

11 x 9 = 99

10 x 9 = 90

It is interesting that there is no number which can be multiplied by 17 to get an answer in the nineties.

	partial level (1 or 2)	full level (3)
Modeling/ Formulating (weight: 0)		
Transforming/ Manipulating (weight: 2)	The final answer is not consistent with the inserted numbers.	In all cases, the inserted numbers lead to the stated final answer.
Inferring/ Drawing Conclusions (weight: 3)	Student is able to find only some of the possible answers.	Student finds all possible answers.
Communicating (weight: 2)	Explanation in question **3** is not clear, or is incomplete.	Explanation in question **3** clearly describes the assumptions made and logic employed.