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Number Stories and Problem Solving in Grade 3 and Grade 4





Turn and Talk: How did you solve?

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Kathy is a repair technician for a phone company. Each week, she received a batch of phones that need repairs. The number of phones that she has left to fix at the end of each day can be estimated with the equation P = 108 - 23d, where P is the number of phones left and d is the number of days she has worked that week. What is the meaning of the value 108 in this equation?

- A) Kathy will complete the repairs within 108 days.
- B) Kathy starts each week with 108 phones to fix .
- C) Kathy repairs phones at a rate of 108 per hour
- D) Kathy repairs phones at a rate of 108 per day

Part B: A different fruit bar is a total of 5 inches long. It is split into two pieces. One piece of this fruit bar is 60% of the whole fruit bar's length. What are the lengths, in inches, of the two pieces?

Show your work.



What is the greatest number of squares whose sides are each 0.01 centimeters long that can fit inside a larger square whose sides are each 1 centimeter long?

Show your work.

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Excellent Problem Solving:What Does it Look Like?



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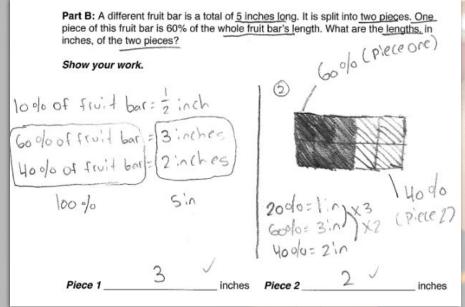
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Part B: A different fruit bar is a total of 5 inches long. It is split into two pieces/One piece of this fruit bar is 60% of the whole fruit bar's length. What are the lengths, in inches, of the two pieces? \ ---Show your work. Piece 1 3



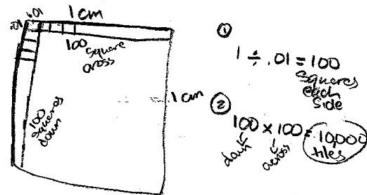


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What is the greatest number of squares whose sides are each 0.01 centimeters long that can fit inside a larger square whose sides are each 1 centimeter long?

Show your work.







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Great mathematicians invest in the question and always make mind movies. In other words, mathematicians always create a mental picture of a problem as they're reading it, to help them understand the problem.



Great mathematicians always make a plan for how they will solve the problem, and they show their work every time. Great teachers of mathematics hold scholars accountable for doing so. Insist that this is done daily.





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Explore More: Non-Examples and Number Stories Resources

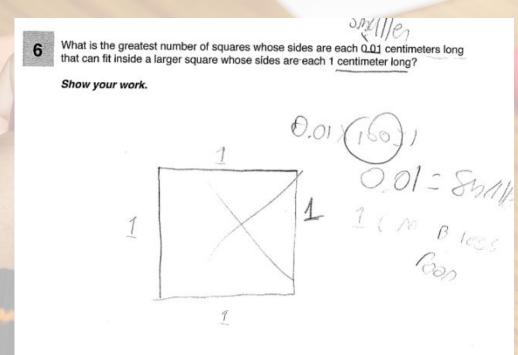


Non-Examples: Understand the Problem

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What is the greatest number of squares whose sides are each 0.01 centimeters long that can fit inside a larger square whose sides are each 1 centimeter long? Show your work.



Non-Examples: Understand the Problem

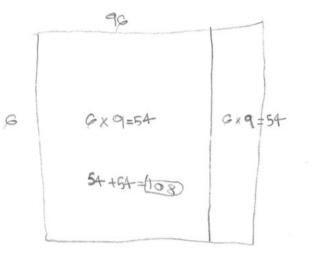
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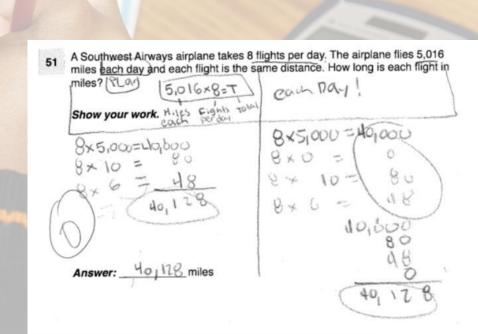
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7. Mr. Larson put a rectangular carpet in his living room. The area of the carpet is 96 square feet and the width is 6 feet.

a. What is the length of the carpet?

Show your work.





Answer: 108 length

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Explore Number Stories by Grade on our Website!

- Grade 1
- Grade 2
- Grade 3
- Grade 4

