Grade 4 Main NAEP Results: 1996 to 2011

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NCTM Research Preession, Philadelphia
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4th-grade scores by content strand

- Algebra
- Data Analysis, Probability & Statistics
- Geometry
- Measurement
- Number & Operations
A CLOSER LOOK AT SOME INTERESTING RESULTS ON ITEMS RELEASED IN 2011
Algebra

**N + 4 = 12**

What value of n makes the number sentence true?

1. 3
2. 4
3. 8
4. 16

Each of the 18 students in Mr. Hall’s class has p pencils. Which expression represents the total number of pencils that Mr. Hall’s class has?

A. 18 + p
B. 18 – p
C. 18 \times p
D. 18 ÷ p
Ms. Livingston’s class spins the arrow on the spinner 92 times. Of the following, which is the most likely result?

A. 66 green, 26 blue
B. 46 green, 46 blue
C. 23 green, 69 blue
D. 2 green, 90 blue

Did you use the calculator on this question?

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<td>78</td>
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</table>
Which decoration CANNOT be folded along the dotted line so that both parts match?

A.  
B.  
C.  
D.  

Did you use the calculator on this question?

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Measurement

Which unit would probably be used to measure the length of a book?
1. Inches
2. Yards
3. Square inches
4. Square yards

Which unit would be best to measure the amount of liquid in a spoonful of lemon juice?
1. Milliliters
2. Liters
3. Millimeters
4. Meters

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### Measurement

**Which unit would probably be used to measure the length of a book?**

1. Inches
2. Yards
3. Square inches
4. Square yards

**4 quarts = 1 gallon**

Amy wants to put 8 gallons of water into her aquarium. She has a 2-quart pitcher to carry water from the sink. How many times will she need to fill her pitcher?

1. 4
2. 10
3. 16
4. 32

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Number Properties & Operations

On the number line above, what is the sum of the numbers to which the arrows X, Y, and Z point?

1. 1,491
2. 1,515
3. 1,530
4. 1,545

Did you use the calculator on this question?

Multiply: \[ 8.5 \times 4.9 \]

Answer: ____________________

Did you use the calculator on this question?

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<th>Year</th>
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GENDER AND ETHNICITY
SOCIO-ECONOMIC STATUS AS MEASURED BY ELIGIBILITY FOR FREE OR REDUCED LUNCH