



Lesson Plan: Paying for Crime

Student Worksheet #3: Average Spent per State (scientific notation)

Concept: In the U.S. \$22 billion dollars are spent on prisons. If we want to find the average per state, we need to know how many states were included in the study (51, as shown in table of states in Excerpt 3a).

Calculations:

Solve for X

$$\text{\$22 billion} / 51 \text{ states} = X$$

Concept: How many zeroes would a billion have?

Calculations: We can use scientific notation to represent such a large number: 1×10^9

Solve for X

22 billion would be 22×10^x

$$22 \times 10^x / 51 = X$$

AND finally: $X = \#$ in millions