



Review the definition of integers and the rules for the operations of adding, subtracting, multiplying, and dividing integers. Study the pattern of integers below.

$$\begin{aligned} +3 \times +4 &= +12 \\ +3 \times +3 &= +9 \\ +3 \times +2 &= +6 \\ +3 \times +1 &= +3 \\ +3 \times 0 &= \dots \\ +3 \times -1 &= \dots \end{aligned}$$

Extend the pattern of multiplication of integers on into the negative integers a ways. Create and extend patterns of division, addition, and subtraction as well.

Analyze these patterns and state as many rules for adding, subtracting, multiplying and dividing integers as you can discover.

Example: Rule: When adding two positive integers, the answer will be positive.
Rule: When adding a positive and negative integer, the answer will be...
Rule: and so on...

Construct an attractive, creative display showing the patterns and rules you developed.

Extension: Make up a story about Dr. Integers performing operations on patients in Real Number Hospital. Share your story with the class.