Can you Describe Patterns Using Variables & Expressions?

What’s a Variable?

A **variable** is a letter that “stands for” or represents a number. We need variables because the number always changes or varies.

Examples:

\*the number of weeks you get an allowance (choose “w” for the variable weeks)

\*the number of hours you babysit (choose “h” for the variable hours)

\*the number of days you pay to play on online video game (choose “d” for days)

Variable: any letter that “stands for” (represents) a number

 -changes (varies)

Constant: a number that you add to OR subtract from a variable

 -stays the same (constant)

Coefficient: a number that multiplies the variable

 Examples:

 -doubling the variable “f” can be written as 2 x f OR just 2f

 -tripling the variable “f” can be written as 3 x f OR just 3f

What’s an Expression?

Expression: can be a number by itself Example: 6

 can be a variable by itself Example: r

 can be a variable with a number

Example: 6r (the number and the variable “r” are being multiplied)

 6 – r (the variable “r” is subtracted from the number)

 r + 6 (the number is being added to the variable “r”)

 5r – 6 (“r” is multiplied by 5 and 6 is subtracted from the result)

 r/6 (a fraction is just a division; the variable “r” divided by 6)