When a mathematical expression in Java is evaluated:

~ All the * and / are evaluated left-to-right first.
~ All the + and - are evaluate left-to-right second.
~ When an operation's types differ, the result is of the bigger type (byte < short < int < long < float < double < String).
~ Parentheses can be used to change the default grouping.

For example, 1.0 + 2 * 3 + "Yow!" evaluates to the String "7.0Yow!" and (1.0 + 2) * 3 + "Yow!" evaluates to the String "9.0Yow!" according to these rules.

1) Assume you have variables b, s, i, l, f, d, t with types byte, short, int, long, float, double and String, respectively. Identify the order of operations by writing a number under each operation starting with 1. Under each number write the type that the operation results in.

    b + s * i

    d + i * f + f

    b * s + i / l + f * d + t

2) Evaluate the following expressions, giving the type and value of the result. By default integer, floating-point, and String literals have types int, double and String, respectively.

    1 + 2.0 + "3"

    1 + "2.0" + 3

    "1" + 2.0 + 3

    2 * 2 / 4

    2 / 4 * 2