

Expression Worksheet

Convert the following infix expressions to prefix and postfix form, and draw the expression tree for each. Assume the normal Java operators and precedence rules.

a) **$a * b + c$**

PREFIX:

POSTFIX:

EXPRESSION TREE:

b) **$a * b - c / d + 3$**

PREFIX:

POSTFIX:

EXPRESSION TREE:

c) **$a + b - c * d$**

PREFIX:

POSTFIX:

EXPRESSION TREE:

d) Given $a=2$, $b=3$, $c = 8$, and $d=4$, postorder evaluate the expression trees in b) and c).