

MAU11601 Assignment 0
Due 2026-10-01

1. Rewrite the following expressions, written in infix notation, with the precedence and associativity rules which are customary in mathematics, in a form suitable for Racket, i.e. as fully parenthesised prefix expressions. Note that the exponentiation function in Racket is named `expt`.

(a) $\frac{1+2-3}{4-5+6}$

(b) $1 + 2 < 3^{4^5}$

2. Our maze example doesn't respect Newton's first law of motion: that bodies at rest or in motion remain at rest or in motion unless acted upon by an outside force. Change it so that it does. In other words, pressing keys should change the velocity of the catgirl, not just move her by one step.