Expressions of real and int types in JJ

Real Expression Examples

Set rate = 8.25 -- percent
Set tax = cost * rate / 100.0
Set total = cost + tax
Set C = 5.0 / 9.0 * (F - 32.0)
Set F = 9.0 / 5.0 * C + 32.0
Set y = m * x + b -- equation of line
Set poly1 = A + B*X + C*X*X + D*X*X*X
Set poly2 = A + B * (X + C * (X + D*X))
Set circumference = 2.0 * PI * radius
Set volume = length * width * height
Set girth = length + width + height
Set radians = (PI / 180.0) * degrees
Set hypotenuse = Sqrt (x*x + y*y)
Set y = Sin (A * t + B )

Integer Expression Examples

Set count = 0
Set rate = MaxRate
Set hours = minutes / 60
Set rightDigit = intVal % 10
Set cents = pennies + 5 * nickels + 25 * quarters
Set total = secs + 60 * mins + 3600 * hours
Set total = secs + 60 * (mins + 60 * hours)
Set quotient = numerator / denominator
Set remainder = numerator % denominator
Set hour = militaryTime / 100
Set mins = militaryTime % 100

Mixed Expression Examples involving both reals and ints

Set mean = rSum / IntToReal (num) -- rSum is real sum
Set mean = IntToReal (iSum) / IntToReal (count)
Set cost = price * IntToReal (quantity)
Set round = RealToInt (realValue + 0.5)
Set kilos = (IntToReal(ounces) + IntToReal(16 * pounds)) * kilosPerOunce