

For mathematical expressions use the standard python math documentation as reference:
<https://docs.python.org/3/library/math.html>

reserved terms

for natural logarithm (ln) use ln(x)

for Euler's number use: e

for π use pi

examples on how to transcribe some expressions in a way the program can handle:

1) $d = (1/2)(v_f + v_i)t \rightarrow (1/2) * (v_f + v_i) * t$

2)

$$v^2 = v_0^2 + 2 \cdot a \cdot \Delta s \rightarrow \text{pow}(v, 2) = \text{pow}(v_0, 2) + 2 * a * (s - s_0)$$

3) $N_1 \cdot \sin(\alpha_1) = N_2 \cdot \sin(\alpha_2) \rightarrow n_1 * \sin(a_1) = n_2 * \sin(a_2)$

4) $5x^2 + 8x + 5 \rightarrow 5 * \text{pow}(x, 2) + 8 * x + 5$

5) $\omega = 2 \cdot \pi \cdot f \rightarrow o = 2 * \text{pi} * f$

6) $v_x = v_0 \cdot \cos \theta \rightarrow vx = v_0 * \cos(a)$

7) $H = \frac{v_0^2 \cdot \sin^2 \theta}{2 \cdot g} \rightarrow h = (\text{pow}(v_0, 2) * \text{pow}(\sin(a), 2) * a) / 2 * g$