

> Usain Bolt Average Acceleration during run start  
for 2009 world record 100m sprint

Error, missing operator or `;

>  $vav := 10.438$

$$vav := 10.438 \quad (1)$$

>  $vmax := 12.42$

$$vmax := 12.42 \quad (2)$$

>  $TT := 9.58$

$$TT := 9.58 \quad (3)$$

>  $eq1 := vav = \left( \frac{vmax}{TT} \right) \cdot \left( TT - \left( \frac{vmax}{a0} \right) \cdot \ln \left( 1 + \left( \frac{a0 \cdot TT}{vmax} \right) \right) \right)$

$$eq1 := 10.438 = 12.42000000 - \frac{16.10192066 \ln(1 + 0.7713365539 a0)}{a0} \quad (4)$$

>  $solve(eq1, a0)$

$$24.20129792 \quad (5)$$