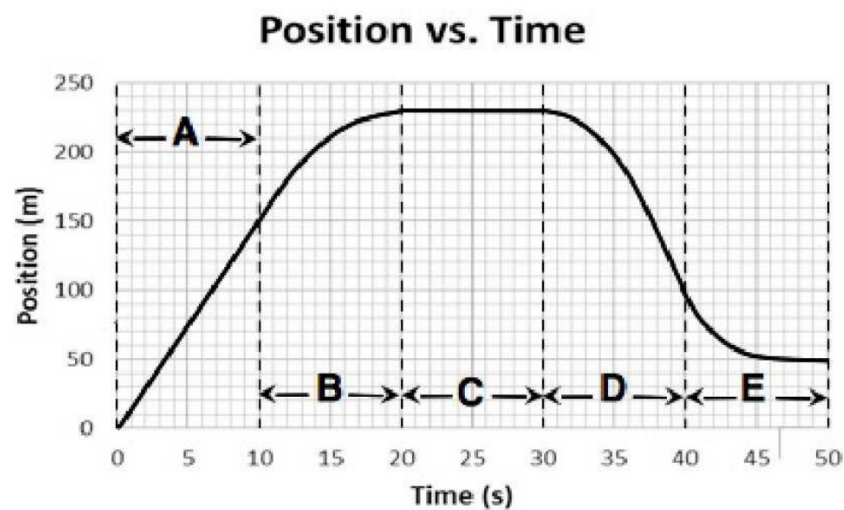


Fill in the blank

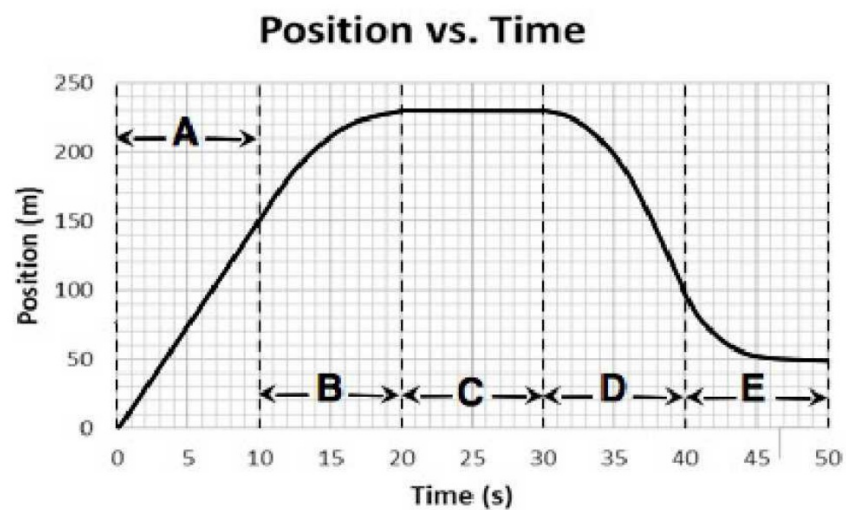
- The slope on a Position vs. Time graph indicates Velocity.
- The slope on a Velocity vs. Time graph indicates acceleration.
- The area between the plot of velocity (on a Velocity vs. Time graph) and the horizontal axis indicates displacement.

Fill in the blank

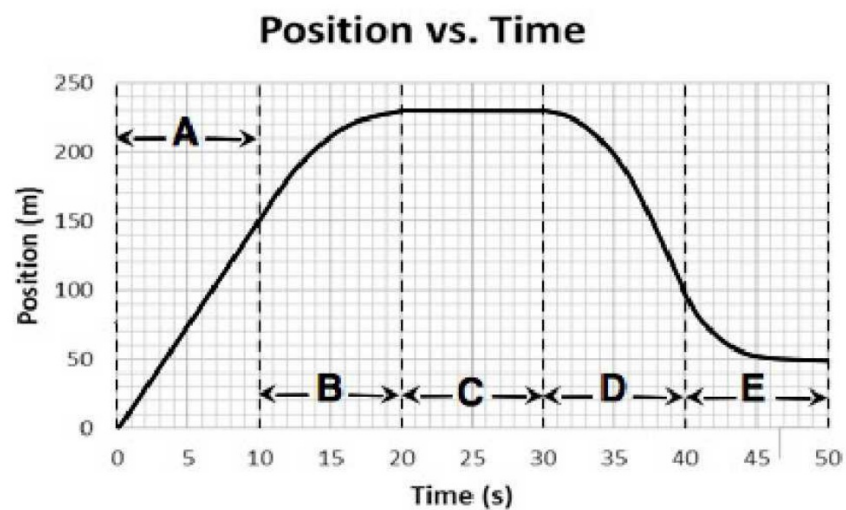
- The symbol for the acceleration due to gravity is g and has a value of -9.8 near earth.
- In the absence of air resistance, all objects fall with constant acceleration.
- A vector is a quantity that requires both magnitude and direction to fully describe it.



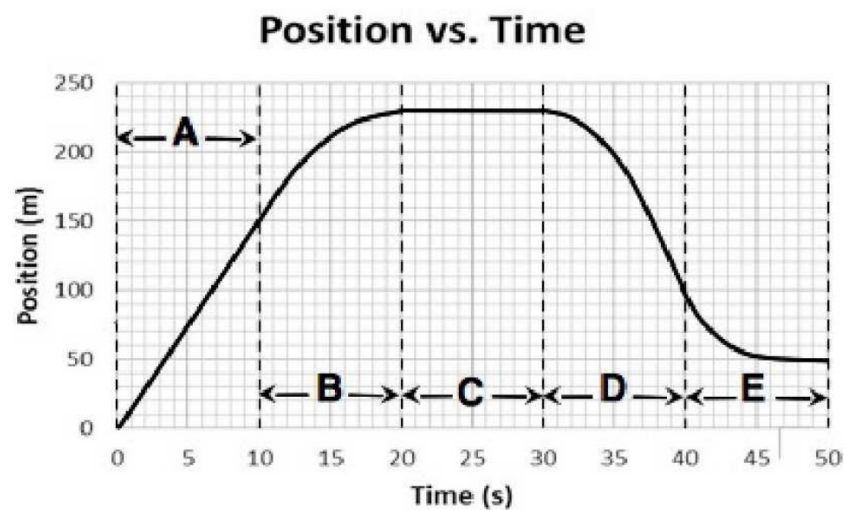
From 0 to 10 seconds, the unicyclist is Constant V_{in} in the positive direction.



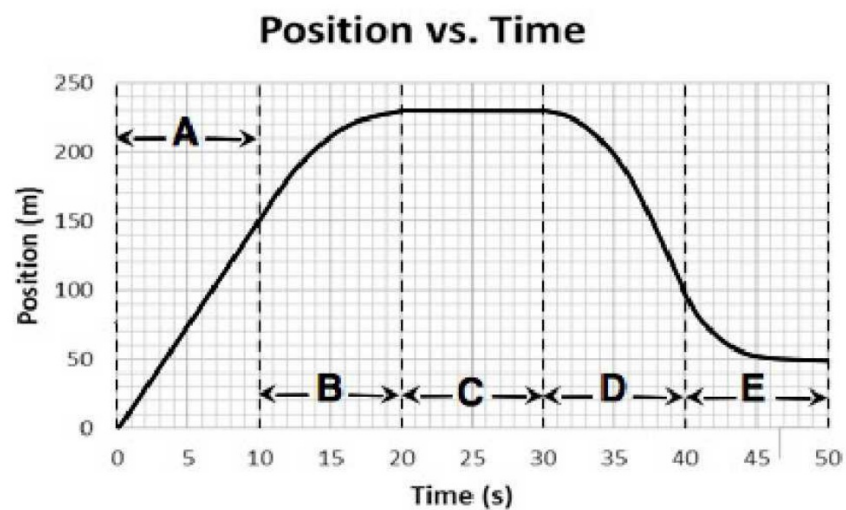
From 10 to 20 seconds, the unicyclist is Slowing down in the + direction.



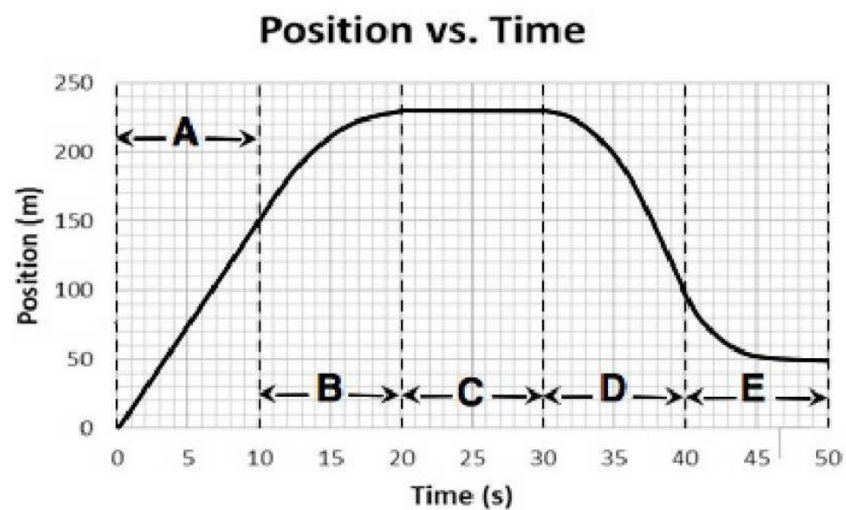
From 20 to 30 seconds, the unicyclist
is not moving in the
_____ direction.



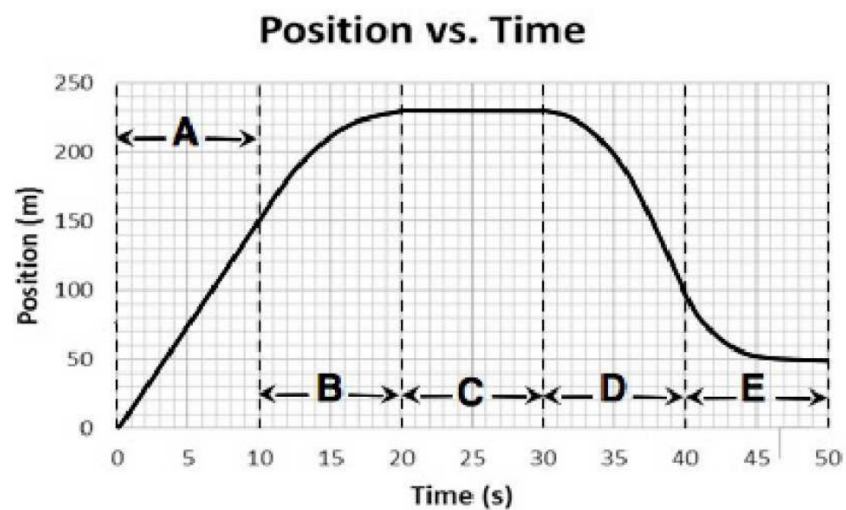
From 30 to 40 seconds, the unicyclist is accelerating in the negative direction.



From 40 to 50 seconds, the unicyclist
 is slowing down in the
~~neg~~ neg direction.

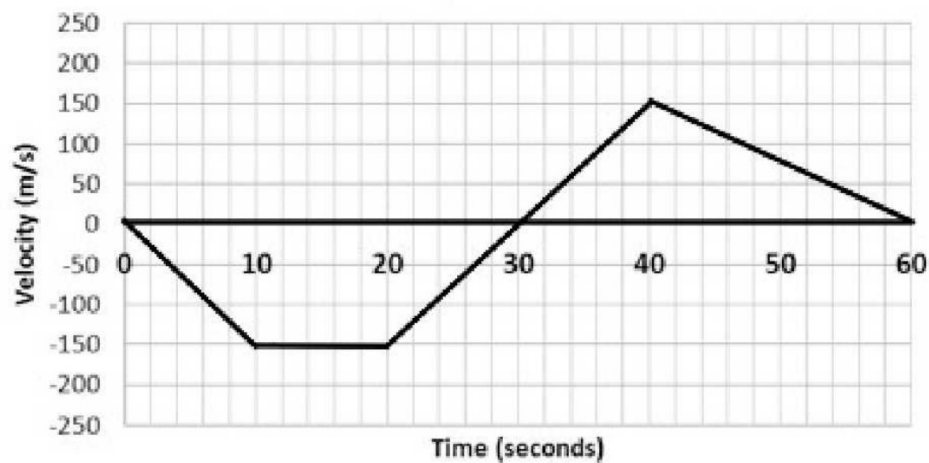


What is the average velocity of the unicyclist from $t = 30$ to 40 seconds?



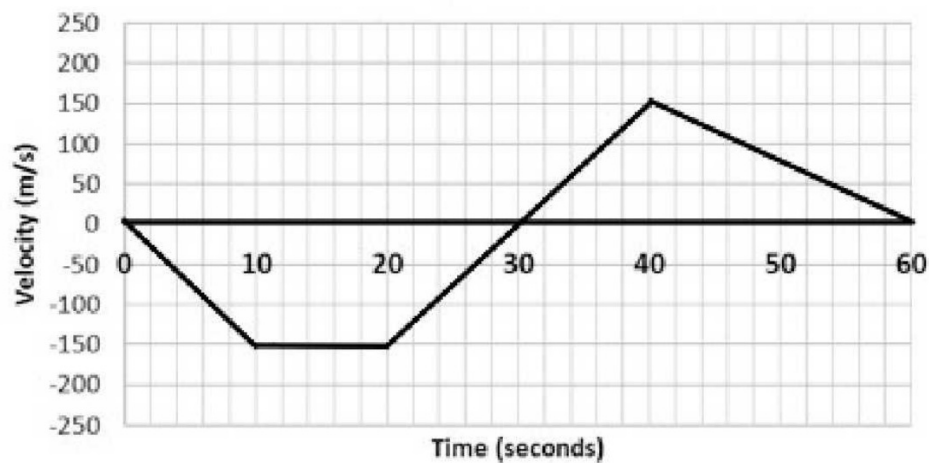
What is the instantaneous velocity at $t = 6$ seconds?

Velocity vs. Time



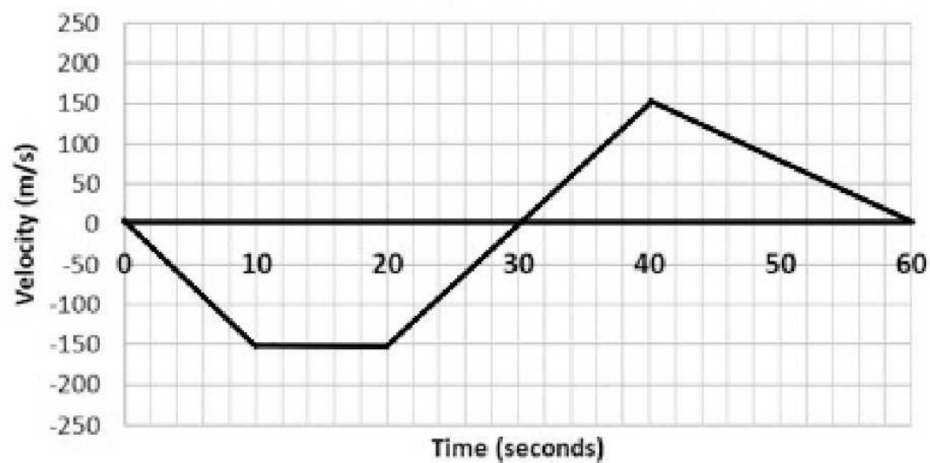
From 0 to 10 seconds, the particle is
accelerating in the
neg direction.

Velocity vs. Time



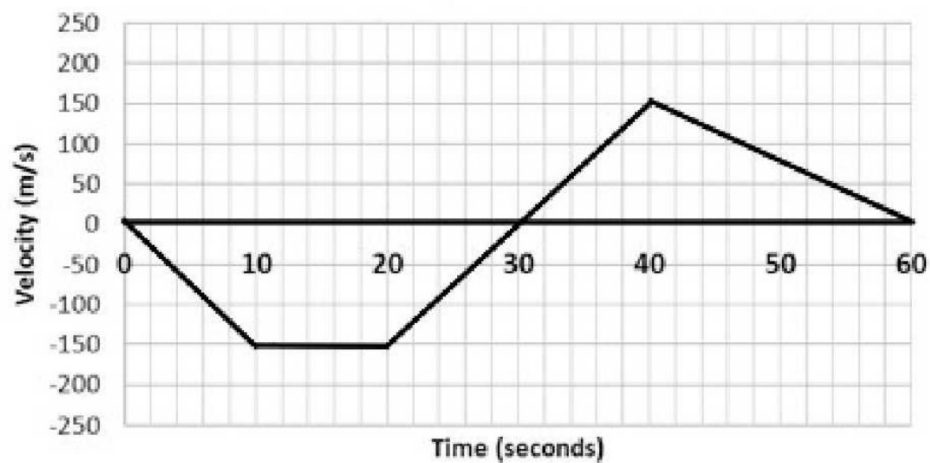
From 10 to 20 seconds, the particle is
@ const speed in the
Neg direction.

Velocity vs. Time

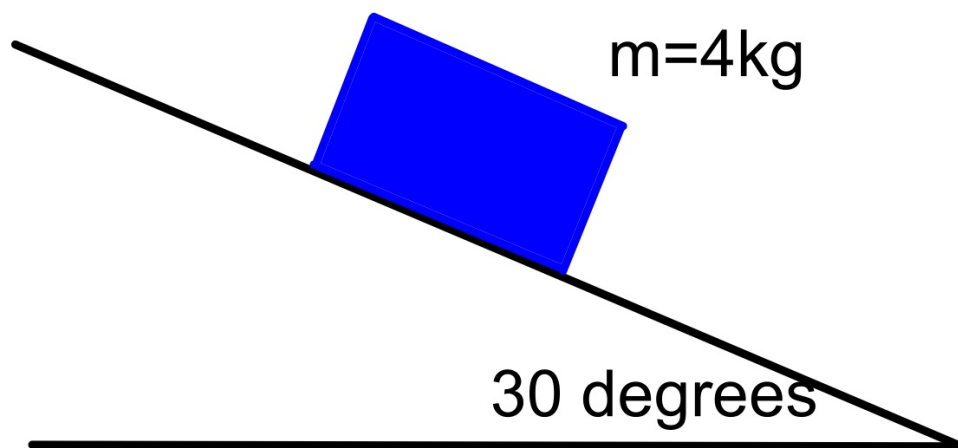


From 20 to 30 seconds, the particle is
Slowing Down in the
neg direction.

Velocity vs. Time

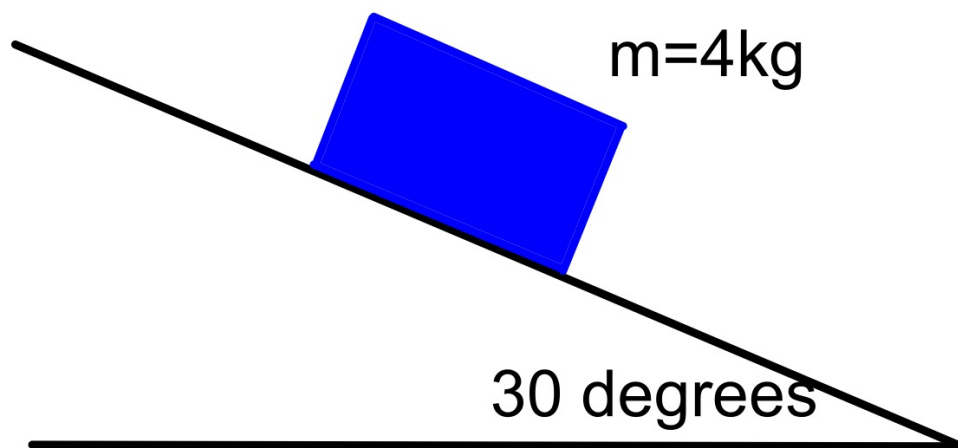


From 40 to 60 seconds, the particle is
slowing in the
positive direction.



$$\mu_s = 0.57$$

What is the minimum coefficient of static friction so that the block does not slide?



If the coefficient of friction is 0.15, what is the acceleration of the block down the ramp?