

Simulation #1



A car starts with a velocity of 0 m/s and accelerates at 7 m/s.
what is the velocity after 8 seconds?
what is the velocity as the car passes 25 m
when does the car pass 100m
when is the car's velocity 22 m/s

Simulation #2

A truck starts with a velocity of 45 m/s and accelerates at -6 m/s.
what is the velocity after 4.2 seconds?
where is the truck after 4.2 seconds?
when is the truck's velocity 0 m/s
where is the truck when it has a velocity of 0m/s
what is the velocity after 42 seconds?
where is the truck after 42 seconds?



Simulation #3

A car starts with a velocity of 0 m/s and accelerates at 5.6 m/s.
at that exact moment, a truck passes with a constant velocity of 30 m/s.



at what time will the car pass the truck?
where will the car pass the truck?
Which would win a 200 m race?



Simulation #4

A sailboat starts with a velocity of -15 m/s and travels for 5 minutes.
Then, it runs into a head wind that makes it accelerate at +4 m/s².
How much longer does it take until the boat stops?
What is the total distance travelled by the boat?

