



Practice #1: The Shinkansen, Japan's high-speed "bullet train," consists of several different versions of trains that have been in service since 1963. The 100-series trains consist of 16 steel cars that have a combined mass of 9.25×10^5 kg. The top speed of the regular 100-series train is 140 mi/hr or 61m/s. What would be the momentum of the train?

Practice #2: Thoroughbred horses are among the fastest horses in the world and are in famous racing events such as the Kentucky Derby. The mass of a galloping thoroughbred is about 5.00×10^2 kg. If a horse is galloping with a momentum of 8.22×10^3 kg•m/s, what is its speed?

Practice #3: Although larger than the Atlantic walrus, the Pacific walrus can swim with a speed of about 9.7 m/s. If the momentum of a swimming walrus is 1.07×10^4 kg•m/s, what is its mass?