


Force applied to a Spring Worksheet

$$F = ke$$

force applied to a spring (N) spring constant (N/m) extension (m)



1. A trampoline uses springs to support the jump mat. A single spring was tested for quality control. The spring had a spring constant of 4500 N/m. Calculate the force needed to give an extension of 0.15 m.
2. Calculate the extension of the spring if a force of 800 N was applied to a spring with a spring constant of 3200 N/m.
3. If a spring had an extension of 0.2 m when a force of 1200 N was applied calculate the spring constant of the spring.