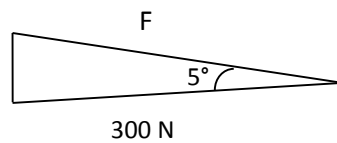


Answer on Question #63166, Physics / Mechanics | Relativity

a rope tied to a tree and a car bumper with 300 N of force applied mid way between applies how much force to the car if the rope is deflected 5 degrees.

Solution:



Of Figure $\Rightarrow \cos 5^\circ = \frac{300}{F}$ (1)

Of (1) $\Rightarrow F = \frac{300}{\cos 5^\circ}$ (2)

Of (2) $\Rightarrow 301.2 \text{ N}$

Answer:

301.2 N