Answer on Question #48574 – Math – Calculus

Task:

According to Hook's Law, the force F (in pounds) required to stretch a certain spring x inches beyond its natural length is given by F = (4.5)x. If 10 <= F <= 18, what is the corresponding range for x?

Solution:

$10 \leq F \leq 18$; F = (4.5)x $\Rightarrow$ $10 \leq (4.5)x \leq 18$ $\Rightarrow$ $\dfrac{20}{9} \leq x \leq \dfrac{36}{9}$