9 A student hangs a mass from the end of a spring and sets the mass into vertical oscillation. The period of oscillation of the mass is *T*.

The student then hangs the same mass from a second spring, with a spring constant four times that of the first spring.

What is the period of oscillation of the mass on the second spring?

 \triangle A T/4

B *T*/2

C 2T

 $\mathbf{D} + 4T$

(Total for Question 9 = 1 mark)