	Α	extension original length							
	В	force cross-sectiona	l are	 ea					
	С	force extension							
	D	Young modulu original length	_						
20		A wire is stretched by applying increasing values of force $F$ . For each value of force applied, the extension $x$ is recorded. A force–extension graph is plotted from the data obtained.							
	Wh	Which statement about the area under the graph <b>must</b> be correct?							
	Α	It can be calculated as $\frac{1}{2}Fx$ .							
	В	It is the elastic potential energy stored in the stretched sample.							
	С	It is the work done in stretching the sample.							
	D	It would be the	san	ne for any wire	of the	same ma	aterial.		
21	Αp	a progressive radio wave in a vacuum has a frequency of 75 MHz.							
		What is the phase difference between two points on the wave that are 50 cm apart from each other?							
	A	23°	В	45°	С	90°	Γ	D	180°
22	Wh	Which statement is correct for longitudinal waves but <b>not</b> correct for transverse waves?							
	Α	They can form stationary waves.							
	В	They can only travel through a medium.							
	С	They can transfer energy in the direction of travel.							
	D	They consist of	f pea	aks and trough	ıs.				

Which expression is equal to the stress on a wire?