

temperature is  $27^{\circ}\text{C}$ . Find the tension in the wire. Given, the velocity of sound in air at  $0^{\circ}\text{C}$  is  $331\text{m/s}$  and the density of steel is  $7800\text{kg/m}^3$ . [20.5N] 3

- e. A sonometer wire is stretched by a cylinder having a density of  $800\text{kg/m}^3$  to produce a fundamental frequency of  $256\text{Hz}$ . What will be the new fundamental frequency if the cylinder is completely immersed in water? [239Hz] 3

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Simplified Note