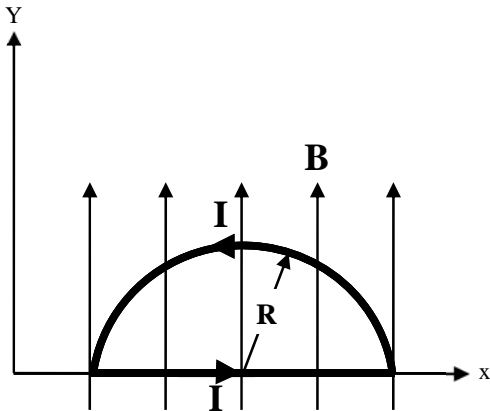


A wire bent into a semicircle of radius R forms a closed loop and carries a current I , as shown in the Figure below. The wire lies in the xy plane, and a uniform magnetic field is directed along the positive y axis. What is the magnetic force on the curved portion of the wire in terms of I , B and R ?



$$\begin{aligned}
 \vec{F} &= I \vec{l} \times \vec{B} \\
 &= I l_{\perp} B (-\hat{k}) \\
 &= -I(2R)B \hat{k} \\
 &= -2IRB \hat{k}
 \end{aligned}$$

04 Sep	11 Sep	18 Sep	25 Sep	2 Oct	9 Oct	23 Oct	30 Oct	6 Nov	13 Nov	20 Nov	27 Nov	4 Dec	11 Dec	18 Dec
Solutions of the quizzes can be found on the webpage: http://faculty.kfupm.edu.sa/phys/aljalal/phys102.htm														
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