

10. (a) Recalling the *straight sections* discussion in Sample Problem 30-1, we see that the current in the straight segments colinear with C do not contribute to the field at that point.
- (b) Eq. 30-11 (with $\phi = \pi$) indicates that the current in the semicircular arc contributes $\mu_0 i/4R$ to the field at C . The right-hand rule shows that this field is into the page.
- (c) The contributions from parts (a) and (b) sum to

$$\vec{B} = \frac{\mu_0 i}{4R} \quad \text{into the page .}$$