

51. The point at which we are evaluating the net field is denoted by  $P$ . The contributions to the net field caused by the two electrons nearest  $P$  (the two electrons on the side of the triangle shared by  $P$ ) are seen to cancel, so that we only need to compute the field (using Eq. 23-3) caused by the electron at the far corner, at a distance  $r = 0.17$  m from  $P$ . Using  $1/4\pi\epsilon_0 = k$ , we obtain

$$\left| \vec{E}_{\text{net}} \right| = k \frac{e}{r^2} = 4.8 \times 10^{-8} \text{ N/C} .$$