

- (1) From Section 17.9: 24 and 27. (In 5th Ed: 22, and 25.)

Hint: On the former problem, think about $\mathbf{F} = (2, 2, z)$.

- (2) From Section 17.8: 4, 8, 14, and 19 (both editions).

Note: Problems 17.8.19 and 17.9.27 are essentially the same. Try to come up with different solutions by using the ideas from the corresponding chapter. For 17.8.19, it may help to think of the whole sphere as the union of two hemispheres.