9-10. Why do we not need to be careful to write

$$\frac{1}{2}\left(\mathbf{p}_1 \exp(-i\mathbf{k}\cdot\mathbf{x}) + \exp(-i\mathbf{k}\cdot\mathbf{x})\,\mathbf{p}_1\right)$$

in the matrix elements?

This problem stands out as the easiest. The exponential is a scalar so the order doesn't matter.