

Three problems out of the text.

Due Monday, 14 January, 2008.

1 Serway, Problem 23.7

This is the type of problem most likely to be asked on an exam covering Coulomb's Law. Remember what you learned in SP211 about summing vectors. Follow Serway's example of calculating the straight line forces between pairs of charges first, *then* breaking those forces into components so that they may be summed...

2 Serway, Problem 23.9

Remember that *equilibrium* does not mean zero charge...

3 Serway, Problem 23.10

Just do part (a). The identity

$$\cos(\arctan x) = \frac{1}{\sqrt{1+x^2}} \quad (1)$$

will be useful.