

Final Exam practice questions

MSE 270, Atomistic Materials Science

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1. *Prove that a disordered FeCo magnet will have extinctions for elastic X-ray scattering*
2. *For $2_1 \parallel c$, derive extinction criteria for $(00l)$ reflections*
3. *For arbitrary intersection of two mirrors, derive the rotation axis.*
4. *For $\bar{4}$ operating with vertical mirrors, derive (a) order of rotation axis that is created and (b) orientation with respect to mirrors.*