

## Year 11 Objective List – Higher      HT1

### Graphical Solutions & Sketching Graphs

Objective	Sparx Task	
1. Sketch and interpret quadratic graphs. Understand intercepts, max/min values and roots	U989	
2. Expand three brackets and link this to sketching simple cubic graphs	U606	
3. Solve simultaneous equations graphically	U875 U836	
4. Extend graphical solutions to linear/quadratic and linear/circle	U667	
5. Solve graphical inequalities in two variables	U133	
6. Solve quadratic inequalities by finding and interpreting critical values	U747	
7. Use an iterative formula to find solutions to an equation	U356 U434	

### Revision: Multiplicative Reasoning

Objective	Sparx Task	
1. Apply repeat proportional change	U988	
2. Solve problems by forming equations from given ratios/relationships	U573	
3. Recall the formula for speed and use this to solve problems including multi-stage journeys	U151	
4. Recall the formula for density and use this to solve problems, including working with volumes of solids.	U842	
5. Recall the formula for pressure and use this to solve simple problems.	U842	
6. Convert between compound measures.	U256	
7. Apply kinematics formulae (they do not need to recall these)	U144	
8. Set up and solve equations where two variables are directly proportional.	U407	
9. Set up and solve equations where two variables are inversely proportional	U138	
10. Link work on speed to dist/time speed/time graphs	U462	