

GCSE to A-Level Mathematics & Further Mathematics



The Advanced Mathematics Support Programme (AMSP) have put together weekly packs for all year 11 students who are planning to move on to A Level Maths. There are six packs, and a new pack will be released every week.

The packs can all be found at

amsp.org.uk/resource/gcse-alevel-transition-resources

Week 1



Complete AMSP "Simplifying" pack (address above)

Time: 3 hours
Includes videos and links

Optional: Watch



Watch [this amazing numberphile video](#) about the golden ratio, a very special number involving a surd, and why it turns up in nature.

Week 2



Complete AMSP "Expanding" pack (address above)

Time: 3 hours
Includes videos and links

Optional: Listen



Listen to the [Relatively Prime podcast](#), highlighting some of the best maths stories from around the world.

Week 3



Complete AMSP "Factorising" pack (address above)

Time: 3 hours
Includes videos and links

Optional: Research



Research the proof that $\sqrt{2}$ is irrational, and why people were murdered for it.

Week 4



Complete AMSP "Rearranging" pack (address above)

Time: 3 hours
Includes videos and links

Task to be submitted



Two sets of worked solutions for two of the sections in week 1-4. These will be confirmed closer to the date.

Week 5



Complete AMSP "Solving" pack (address above)

Time: 3 hours
Includes videos and links

Optional: Listen



Check out [More or Less](#), a brilliant podcast using maths to make sense of the news.

Week 6



Complete AMSP "Sketching" pack (address above)

Time: 3 hours
Includes videos and links

Optional: Read



Read why [Florence Nightingale](#) was more of an influential mathematician than a nurse.