Year 12 Mathematical Methods
Work rate calendar (WRC) 2025   Term 1

All students are expected to participate in all online lessons and complete all assessment as outlined in this **Work rate calendar**.

Teachers may adjust topics, class work, assessment and submission dates. Adjustments will be communicated via QLearn or during lessons.

Assessment	
Supervised assessment	Summative exams are to be supervised by the student's official exam supervisor.
Non-supervised assessment	Students must sign declaration of academic integrity.

Week	Dates	Unit	Topic	Class work / Assessment to be submitted
1	27 Jan – 31 Jan		Monday 27 January — Australia Day Holiday Tuesday 28 January – Welcome calls: Years Prep–12 Wednesday 29 January – Learning for success: Years Prep–12 **Topic 3 Integrals** Lesson 1 Anti-differentiation and review of Unit 3 work covered in Year 11	Refer to Learning Guides
2	3 Feb – 7 Feb		Monday 3 February — Brainstorm Productions: Years 7–12 (11am–2pm) Lesson 1 Integral of e^x and $\frac{1}{x}$ Lesson 2 Integral of $\sin(x)$ and $\cos(x)$ Lesson 3 Catch-up/Tutorial if available	
3	10 Feb – 14 Feb		Friday 14 February — Senior orientation day: Years 10–12 Lesson 1 Indefinite integrals, constant of integration Lesson 2 Indefinite integrals, linear motion applications Lesson 3 Catch-up/Tutorial if available	
4	17 Feb – 21 Feb	Unit 3	Lesson 1 Differentiation review Lesson 2 Integration by recognition Lesson 3 Integration by recognition	
5	24 Feb – 28 Feb		Lesson 1 Area approximation, trapezoidal rule Lesson 2 Fundamental theorem of calculus Lesson 3 Applications of integration — area under a curve	
6	3 Mar – 7 Mar		Lesson 1 Applications of integration — area between curves Lesson 2 Applications of integration — total change (MAM12B only)	
7	10 Mar – 14 Mar		Lesson 1 Applications of integration — total change (MAM12A and 12C only) Lesson 2 Applications of integration — displacement given acceleration and initial conditions **Revision** Lesson 3 Revision	
8	17 Mar – 21 Mar		**Revision and Exam** Lessons 1 – 3 Revision	
9	24 Mar – 28 Mar		**Revision and Exam** Lesson 1 Revision Lesson 2 Revision (MAM12B only) **Topic 3 Discrete random variables 2** Lesson 2/3 Bernoulli random variables, mean and variance (L2 for MAM12A and 12C, L3 for MAM12B) Lesson 3 Binomial random variables including conditional probability (MAM12A and 12C only)	**IA2 Exam** To be received at BrisbaneSDE by 5 pm Wednesday 26 March
10	31 Mar – 4 Apr	Unit 4	Thursday 3 April — Cross country / Fun run: Prep – Year 12 Lesson 1 Binomial random variables including conditional probability (MAM12B only) Lesson 1/2 Applications of binomial random variables (L1 for MAM12A and 12C, L2 for MAM12B) Lesson 2/3 Binomial distributions – mean and variance (L2 for MAM12A and 12C, L3 for MAM12B) Lesson 3 Catch-up/Tutorial if available (MAM12A and 12C only)	

Disclaimer: Information contained in this document is correct at time of publishing.

LEGEND	Class work — send-in	Summative assessment	Exam block	School events	Public holidays	Student free day

BrisbaneSDE

Year 12 Mathematical Methods
Work rate calendar (WRC) 2025 — Term 2

All students are expected to participate in all online lessons and complete all assessment as outlined in this **Work rate calendar**.

Teachers may adjust topics, class work, assessment and submission dates. Adjustments will be communicated via QLearn or during lessons.

Assessment	
Supervised assessment	Summative exams are to be supervised by the student's official exam supervisor.
Non-supervised assessment	Students must sign declaration of academic integrity.

Week	Dates	Unit	Topic	Class work / Assessment to be submitted
1	21 Apr – 25 Apr		Monday 21 April — Easter Monday Friday 25 April — Anzac Day **Topic 3 Discrete random variables 2** Lesson 1 Modelling binomial distributions **Topic 1 Further differentiation and applications 3** Lesson 2 Concept of the second derivative and acceleration	Refer to Learning Guides
2	28 Apr – 2 May		Lesson 1 Concavity, points of inflection Lessons 2 and 3 Sketching functions, concavity and points of inflection	
3	5 May – 9 May		Monday 5 May — Labour Day Lesson 1 Optimisation — function given Lesson 2 Optimisation – function not given Lesson 3 Catch-up/Tutorial if available	
4	12 May – 16 May		Lesson 1 Optimisation – function not given **Topic 4 Continuous random variables and the normal distribution** Lesson 2 Probability estimates and the probability density function Lesson 3 Hybrid probability density functions	
5	19 May – 23 May	Unit 4	Lesson 1 E(X) of a continuous random variable, review limits and integration by recognition Lesson 2 Var(X) and SD(X) of a continuous random variable Lesson 3 Normal random variables, pdf with mean and std deviation	
6	26 May – 30 May		Lesson 1 Standardised normal variables, z scores, pdf with mean and std deviation Lessons 2 and 3 Normal probabilities, quantiles, modelling	
7	2 Jun – 6 Jun		**Topic 2 Trigonometric functions 2** Lesson 1 SOHCAHTOA, unit circle, periodicity Lesson 2 Review solving trigonometric functions Lesson 3 Review bearings	
8	9 Jun – 13 Jun		Lesson 1 Sine rule for non-right-angled triangles Lesson 2 Cosine rule for non-right-angled triangles Lesson 3 Area rule for non-right-angled triangle, bearings	
9	16 Jun – 20 Jun		Lessons 1 and 2 Modelling in 2 and 3 dimensional contexts **Topic 5 Interval estimates for proportions** Lesson 1 Random samples, bias	
10	23 Jun – 27 Jun		Thursday 26 June — Senior formal: Year 12 Friday 27 June — Athletics carnival / Sports day: Prep – Year 12 Lesson 1 Variability, sample proportion, mean and standard deviation Lesson 2 Catch-up/Tutorial if available	

LEGEND	Class work — send-in	Summative assessment	Exam block	School events	Public holidays	Student free day

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Year 12 Mathematical Methods
Work rate calendar (WRC) 2025　　　　　　　　**Term 3**

All students are expected to participate in all online lessons and complete all assessment as outlined in this **Work rate calendar**.

Teachers may adjust topics, class work, assessment and submission dates. Adjustments will be communicated via QLearn or during lessons.

Assessment	
Supervised assessment	Summative exams are to be supervised by the student's official exam supervisor.
Non-supervised assessment	Students must sign declaration of academic integrity.

Week	Dates	Unit	Topic	Class work / Assessment to be submitted
1	14 Jul – 18 Jul	Unit 4	**Topic 5 Interval estimates for proportions** Lesson 1 Approximate normality of sample proportion, random sampling, interval estimates Lessons 2 and 3 Margin of error, confidence intervals, simulations	
2	21 Jul – 25 Jul		**Revision** Lessons 1 – 3 Revision	
3	28 Jul – 1 Aug		Lessons 1 – 3 Revision	
4	4 Aug – 8 Aug		**Topic 2 Trigonometric functions 2** Lesson 1 Sine rule — the ambiguous case **Topic 4 Continuous random variables and the normal distribution** Lesson 2 Cumulative distribution functions	**IA3 Exam** To be received at BrisbaneSDE by 5 pm Monday 4 August
5	11 Aug – 15 Aug	Units 3&4	Wednesday 13 August — Royal Queensland (Ekka) Show Holiday **Revision** Lessons 1 – 3 Revision	
6	18 Aug – 22 Aug		Lessons 1 – 3 Revision	
7	25 Aug – 29 Aug		Lessons 1 – 3 Revision	
8	1 Sept – 5 Sept		**Mock exams: Year 12** Monday 1 September – Thursday 4 September Friday 5 September — Student free day	
9	8 Sept – 12 Sept		**Mock exams: Year 12** Monday 8 September – Friday 12 September	
10	15 Sept – 19 Sept		Friday 19 September — Connect day: Years 11–12 Lessons 1 – 3 Revision	

LEGEND	Class work — send-in	Summative assessment	Exam block	School events	Public holidays	Student free day

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Year 12 Mathematical Methods
Work rate calendar (WRC) 2025   Term 4

All students are expected to participate in all online lessons and complete all assessment as outlined in this **Work rate calendar**.

Teachers may adjust topics, class work, assessment and submission dates. Adjustments will be communicated via QLearn or during lessons.

Assessment	
Supervised assessment	Summative exams are to be supervised by the student's official exam supervisor.
Non-supervised assessment	Students must sign declaration of academic integrity.

Week	Dates	Unit	Topic	Class work / Assessment to be submitted
1	6 Oct – 10 Oct		Monday 6 October — King's Birthday Holiday **Revision** Lessons 1 – 3 Revision	
2	13 Oct – 17 Oct		Lessons 1 – 3 Revision	
3	20 Oct – 24 Oct		Lessons 1 – 3 Revision	
4	27 Oct – 31 Oct		**Exams: Year 12** Monday 27 October – Friday 31 October	
5	3 Nov – 7 Nov	Units 3&4	**Exams: Year 12** Monday 3 November – Friday 7 November	
6	10 Nov – 14 Nov		**Exams: Year 12** Monday 10 November – Friday 14 November	
7	17 Nov – 21 Nov		**Exams: Year 12** Monday 17 November – Tuesday 18 November Wednesday 19 November — Celebration: Year 12 Thursday 20 November — Graduation: Year 12 Friday 21 November — Final day: Year 12 Friday 21 November — Aquatic carnival: Prep – Year 11	
8	24 Nov – 28 Nov			
9	1 Dec – 5 Dec			
10	8 Dec – 12 Dec			

LEGEND	Class work — send-in	Summative assessment	Exam block	School events	Public holidays	Student free day