

## MAT 1997 Relevance Checker

- **Red:** Question not relevant for current syllabus.
- **Orange:** Question not entirely relevant for current syllabus but worth attempting. See comments.
- **Black:** Question relevant for current syllabus.

### 1. Multiple Choice

#### (a). Straight Line Passing Through Two Points

This question is relevant for the current syllabus.

#### (b). Hunting Solutions to Cubic

This question is relevant for the current syllabus.

#### (c). Dividing into Three Teams

This question is relevant for the current syllabus.

#### (d). Implications

This question is relevant for the current syllabus.

#### (e). Extremising $\cos(\cos(x))$

This question is relevant for the current syllabus, although it would be set in degrees rather than radians.

#### (f). Large $n$ Limit

This question is relevant for the current syllabus.

#### (g). Largest Coefficient in Binomial Expansion

This question is relevant for the current syllabus.

#### (h). Area Beneath Curve

This question is relevant for the current syllabus.

#### (j). Dividing the Plane

This question is relevant for the current syllabus.

#### (k). Three-Variable Simultaneous Equations

This question is relevant for the current syllabus.

### 2. Quadratic Inequalities

The entirety of this question is relevant for the current syllabus.

### 3. Cardboard Square

The entirety of this question is relevant for the current syllabus.

## 4. Cartesian Geometry

### (a). Finding $a$ and $b$

This part of the question is relevant for the current syllabus, except that a question on a current paper would use degrees rather than radians.

### (b). Expression for $\pi \sin(b)$

This part of the question is relevant for the current syllabus, except that a question on a current paper would use degrees rather than radians.

### (c). Area of Shaded Region

This part of the question uses trigonometric integration and integration by parts, which are not relevant for the current syllabus.

## 5. Martian Songs

The entirety of this question is relevant for the current syllabus.