

## MAT 2003 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). Solutions of Quadratic

This question is relevant for the current syllabus.

#### (B). Approximating Logarithms

This question is relevant for the current syllabus.

#### (C). Trigonometric Equations

This question is relevant for the current syllabus, although it would use degrees rather than radians on a modern paper.

#### (D). Definite Integral

This question uses advanced integration results and is not relevant for the current syllabus.

#### (E). Fractional Inequality

This question is relevant for the current syllabus.

#### (F). First to Throw Six

This question is relevant for the current syllabus.

#### (G). Differential Equation

This question involves either solving differential equations or using the chain rule to differentiate. In either case, it is not relevant for the modern syllabus.

#### (H). Dividing the Plane

This question is relevant for the current syllabus.

#### (I). Buying Biscuits

This question is relevant for the current syllabus.

#### (J). Identifying the True Statement

This question is relevant for the current syllabus except that it involves the modulus function. If it were asked on a modern paper, they would need to give you the definition of  $|x|$  rather than treating it as assumed knowledge. Specifically,  $|x|$  is  $x$  if  $x \geq 0$  and  $-x$  otherwise.

### 2. Fun with Factorials

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

### **3. Cartesian Geometry**

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

### **4. Family of Quadratics**

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

### **5. Light Bulbs**

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