# Student Book: *International Mathematics for Cambridge IGCSE®*

**Syllabus:** Cambridge IGCSE® Mathematics (0607)

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<td>- linear $f(x) = ax + b$</td>
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<td>- quadratic $f(x) = ax^2 + bx + c$</td>
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<td>- cubic $f(x) = ax^3 + bx^2 + cx + d$</td>
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<td>- reciprocal $f(x) = a/x$</td>
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<td>- exponential $f(x) = a^x$ with $0 &lt; a &lt; 1$ or $a &gt; 1$ (compound</td>
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<td>- interest)</td>
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<td>$x$-intercepts and a point,</td>
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<td>vertex or $x$-intercepts with $a = 1$.</td>
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<td>$y = a(x - h)^2 + k$ has a vertex of $(h, k)$</td>
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<td>find zeros, local maxima or minima</td>
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<td>$y = f(x + k)$, $k$ an integer</td>
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### 4. Geometry

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<td>is an element of (\in); is not an element of (\notin);</td>
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<td>is a subset of (\subseteq); is a proper subset of (\subset);</td>
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<td>universal set (U), empty set (\emptyset) or ({});</td>
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<td>complement of (A), (A^\prime); number of elements in (A), (n(A))</td>
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