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| **Topic 5: Calculus** | **Related Rates (AA HL and AI HL Only)** | |
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| 1. Water is being poured into a cone of height cm and base radius cm. The height of the cone is twice the radius of the base. The height of the water is increasing at a rate of cm/min. Find the rate at which the water is being poured, in cm³/min, when the height is 6 cm. | | (5 marks) |
| Mark scheme:    Given:        cm³/min | | (M1)  (A1)  (M1)(A1)    (A1) |