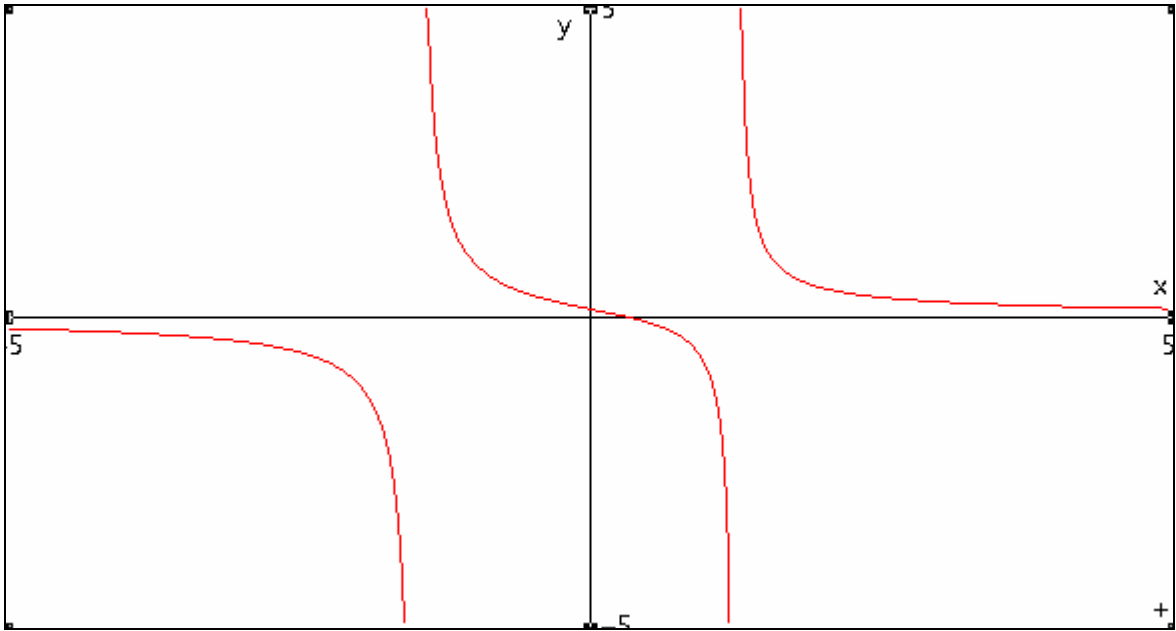


ANSWERS TO SEMESTER ONE EXAMINATION JUNE 2008 (MARCH 2008 INTAKE)

1	$\frac{n(16n^2 + 84n + 143)}{3}$
2	PROVE
3	$2u^3 - 8u^2 + 11u - 15 = 0$
4	<p>Asymptotes : $y = 0$, $x = \frac{-3}{2}$ and $x = \frac{5}{4}$.</p> <p>There are no stationary points.</p> <p>The curve crosses the axes at points : $\left(0, \frac{2}{15}\right)$ and $\left(\frac{1}{3}, 0\right)$</p>  <p>The graph shows a function with three branches in a Cartesian coordinate system. The horizontal axis is labeled 'x' and the vertical axis is labeled 'y'. There are three dashed lines representing asymptotes: a horizontal line at y = 0 (the x-axis), and two vertical lines at x = -3/2 and x = 5/4. The branches are as follows: one in the upper-left region relative to the asymptotes, one in the lower-right region, and a middle branch that passes through the points (0, 2/15) and (1/3, 0). The axes are marked with '5' at the positive end and '-' at the negative end. A '+' sign is at the bottom right corner of the graph area.</p>