

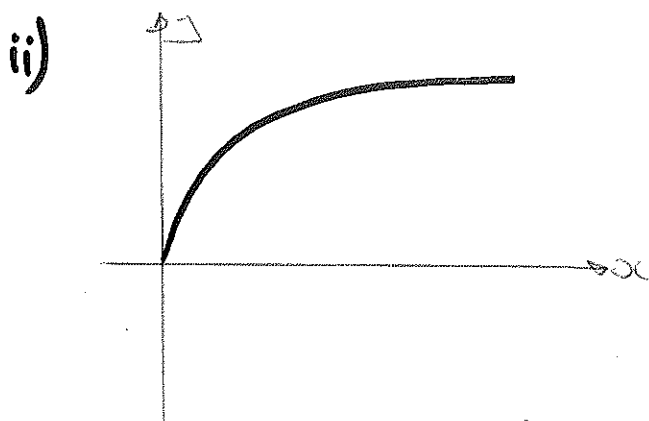
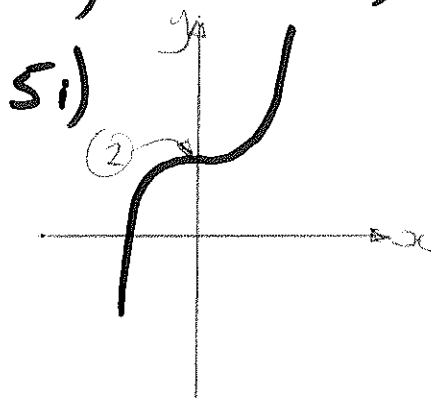
C1 Jan 2008

1)  $6 + 2\sqrt{7}$

2i)  $x^2 + y^2 = 49$       ii)  $r = 8$

3)  $a = 3$        $b = 18$        $c = -17$

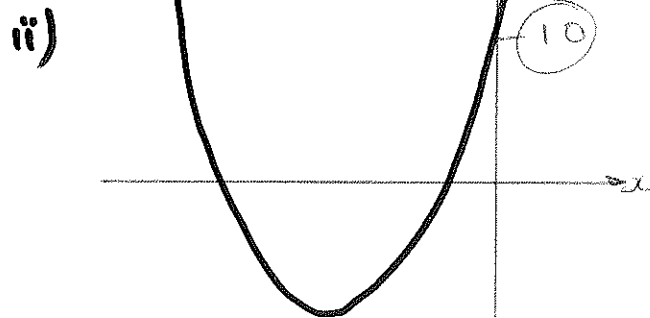
4i)  $-1$       ii)  $\pm 3$       iii)  $8$



iii) Stretka s.f. 1.5  $\uparrow$

6i)  $x = -4 \pm \sqrt{6}$

iii)  $x \leq -\sqrt{6} - 4$   
 $x \geq \sqrt{6} - 4$



7i)  $-\frac{1}{2}$

ii)  $x + 2y - 16 = 0$

iii)  $(\frac{1}{2}, \frac{7}{4})$   $(-2, 3)$

8i) + ii)  $(\frac{1}{3}, \frac{76}{27})$  min  $(-1, 4)$  max

iii)  $-1 < x < \frac{1}{3}$

9i)  $3x - 8y - 1 = 0$

ii)  $(-1, -\frac{1}{2})$

iii)  $2\sqrt{10}$

iv) No

10i)  $48x + 12x^{-5}$

ii)  $x = -\frac{1}{2}$ ,  $x = -1$