



## March Higher Maths Calendar

#abitofmathseveryday

1

4·5



2 $y = -2x + 4$	3 $x \geq -\frac{1}{2}$	4 $y = -3x - 23$	5 $y = \log_4 x$	6 $\frac{1}{3}$	7 $h^{-1}(x) = \sqrt[3]{x - 2}$
8 Limit exists since $-1 < 0.2 < 1$ , Limit = $-\frac{15}{4}$	9 $m = -\sqrt{3}$	10 $C(7, -3)$ Radius = 5	11 Max TP @ (-2, 25), Min TP @ (2, -7)	12 5 units	13 $f(x) = x - x^2 + 14$
14 $y = -x + 6$	15 $8(2x - 5)^3$	16 $k = 3$	17 $-3(x - 2)^2 + 13$	18 $y = -13x - 3$	19 $x < -8$ and $x > 10$
20 $x = \frac{3}{2}$	21 $a = 6$ $b = 4$ $c = 7$	22 $\vec{RS} : \vec{ST} = 5 : 6$ and S is a common point	23 $(x + 1)(x - 5)(x + 4)$	24 $k = 5$	25 $\frac{22}{3} \text{ units}^2$
26 $y = -3(x - 1)(x - 2)(x - 5)$	27 $x = 0.84, 2.09, 4.19, 5.44$	28 Since $b^2 - 4ac = -31$ there are no real roots so line does not intersect the parabola	29 $y = 2^x$	30 $\sqrt{2}\sin(x - 315)^\circ$	31 $-\frac{1}{8}$