

**REVISION : Simultaneous equations, inequalities, gradient between two points and rearranging the equation of a straight line in the form  
 $ax + by + c = 0$**

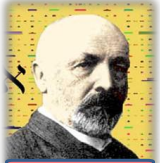
This Top Trumps maths resource has been produced by JustMaths and can be used in the classroom for revising these GCSE A\* topics or for Core 1. The cards are differentiated so that the activity is accessible to most groups of students to enable them to practise these topics at various levels of difficulty.

Here are a few ideas for using these cards in your lessons:

- ✧ Use the differentiation to demonstrate progress throughout the lesson, by giving the students red (pink) and orange cards initially and then introduce the green cards as a challenge.
- ✧ Allow students to choose the combination of colours that they play with, or even let them play with all three colours if they choose.
- ✧ As a final, or mid-lesson plenary, choose a card (or two) from the appropriate level, that the students have to solve to demonstrate their learning. You can do this as a whole class or with individual students.

**Even if you don't remember how to play Top Trumps, there's no need to worry as your students will ... They will also be practising lots of maths too, without even noticing!**


MATHS TOP TRUMPS



Rene Descartes

Intelligence:	highest value of x $x^2 = 4x$
Resilience:	$2x - 5 < 7$
Speed:	Gradient of line (4,2) and (6,3)
Greatness:	y value of $2x + 3y = 8$ $3x - y = 23$

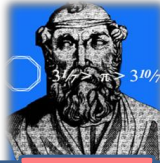
MATHS TOP TRUMPS



Rene Descartes

Intelligence:	highest value of x $x^2 = 25x$
Resilience:	$5x + 9 \geq x + 20$
Speed:	Gradient of line (-1,3) and (5,4)
Greatness:	y value of $4x - 5y = 4$ $6x + 2y = 25$


MATHS TOP TRUMPS



Archimedes

Intelligence:	highest value of x $3x^2 = 6x$
Resilience:	$12 - 3x < 27$
Speed:	Gradient of line (-4,5) and (1,2)
Greatness:	x value of $7x + 3y = 16$ $2x + 9y = 29$

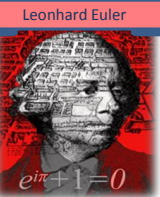
MATHS TOP TRUMPS



Euclid

Intelligence:	highest value of x $3x^2 = 30x$
Resilience:	$2x - 3 < 5$
Speed:	Gradient of line (2,-3) and (6,5)
Greatness:	x value of $4x + 3y = 22$ $2x - y = 6$


MATHS TOP TRUMPS



Leonhard Euler

Intelligence:	highest value of x $x^2 + 3x + 2 = 0$
Resilience:	$5x + 4 \geq 39$
Speed:	Gradient of line (-3,4) and (7,-6)
Greatness:	y value of $4x + 3y = 22$ $2x - y = 6$


MATHS TOP TRUMPS



Pierre de Fermat

Intelligence:	highest value of x $x^2 + 5x + 4 = 0$
Resilience:	$6x - 3 > 2x + 7$
Speed:	Gradient of line (-12,3) and (-2,8)
Greatness:	x value of $2x + 3y = 8$ $3x - y = 23$


MATHS TOP TRUMPS



Gauss

Intelligence:	highest value of x $x^2 + 7x + 10 = 0$
Resilience:	$5x + 6 \leq -12 - x$
Speed:	Gradient of line (-2,-4) and (10,2)
Greatness:	x value of $4x - 5y = 4$ $6x + 2y = 25$

MATHS TOP TRUMPS




Lagrange

Intelligence:	highest value of x $x^2 - x - 6 = 0$
Resilience:	$15 - x > 4$
Speed:	Gradient of line (1/2, 2) and (3/4, 4)
Greatness:	y value of $7x + 3y = 16$ $2x + 9y = 29$

**MAATHS TOP TRUMPS**


**Pierre Laplace**



Intelligence:	highest value of x $x^2 - 8x + 15 = 0$
Resilience:	$21 - 2x > 8 + 3x$
Speed:	Gradient of line $(1.3, -2.2)$ & $(8.8, -4.7)$
Greatness:	y value of $5x + 2y = 6$ $3x - 10y = 26$

**MAATHS TOP TRUMPS**


**Ada Lovelace**



Intelligence:	highest value of x $x^2 - 9x + 20 = 0$
Resilience:	$1 + x < 25 + 3x$
Speed:	Gradient of line $(-2.4, 9.6)$ and $(0,0)$
Greatness:	x value of $2x - y = 12$ $6x + 2y = 21$

**MAATHS TOP TRUMPS**


**Pascal**



Intelligence:	highest value of x $x^2 - 5x - 6 = 0$
Resilience:	$7x - 7 < 7 - 7x$
Speed:	Gradient of line $(-4, -1)$ and $(6,4)$
Greatness:	y value of $3x + 8y = 33$ $6x = 3 + 5y$

**MAATHS TOP TRUMPS**


**G W Leibniz**



Intelligence:	highest value of x $x^2 - 4x - 12 = 0$
Resilience:	$5 - 0.5x \geq 1$
Speed:	Gradient of line $(-1, -5)$ and $(-3,3)$
Greatness:	x value of $3x - 2y = -6$ $6x + 3y = 2$

**MAATHS TOP TRUMPS**

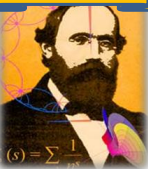
**Pythagoras**



Intelligence:	highest value of x $2x^2 + 7x + 3 = 0$
Resilience:	$5x + 4 > 12 - 2x$
Speed:	Gradient of line $3x - 4y + 8 = 0$
Greatness:	y value of $3x - 2y = -6$ $6x + 3y = 2$

**MAATHS TOP TRUMPS**

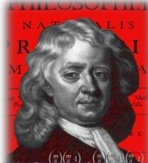
**Georg Reimann**



Intelligence:	highest value of x $6x^2 - 7x - 3 = 0$
Resilience:	$2(x - 3) \geq 0$
Speed:	Gradient of line $4x - 5y - 10 = 0$
Greatness:	x value of $3x + 8y = 33$ $6x = 3 + 5y$

**MAATHS TOP TRUMPS**


**Sir Isaac Newton**



Intelligence:	highest value of x $6x^2 - 5x - 6 = 0$
Resilience:	$8(1 - x) > x - 1$
Speed:	Gradient of line $-2x + y - 9 = 0$
Greatness:	x value of $5x + 2y = 6$ $3x - 10y = 26$


**MAATHS TOP TRUMPS**

**Zeno of Elea**



Intelligence:	highest value of x $4x^2 - 16x + 15 = 0$
Resilience:	$2(x - 3) - (x + 12) < 0$
Speed:	Gradient of line $7x + 4y + 12 = 0$
Greatness:	y value of $2x - y = 12$ $6x + 2y = 21$


MATHS TOP TRUMPS



Madame Kowalewski

Intelligence:	highest value of x $3x^2 + 5x = 2$
Resilience:	$4(2 - x) > x - 1$
Speed:	Gradient of line $2x - 4y + 5 = 0$
Greatness:	y value of $x + 3y = 11$ $4x - 7y = 6$


MATHS TOP TRUMPS



Kurt Godel

Intelligence:	highest value of x $(2x - 3)^2 = 9$
Resilience:	$2(x + 3) \geq 0$
Speed:	Gradient of line $10x - 5y + 1 = 0$
Greatness:	x value of $4x - 3y = 40$ $2x + y = 5$


MATHS TOP TRUMPS



Fibonacci

Intelligence:	highest value of x $(x - 7)^2 = 36$
Resilience:	$5x - 4 > 12 + 2x$
Speed:	Gradient of line $-x + 2y - 4 = 0$
Greatness:	y value of $3x - y = 7$ $10x + 3y = -2$


MATHS TOP TRUMPS



David Hilbert

Intelligence:	highest value of x $2x^2 = 8$
Resilience:	$5x + 4 < 12 - 2x$
Speed:	Gradient of line $-3x + 6y + 7 = 0$
Greatness:	x value of $2y = 2x - 3$ $3y = x - 1$

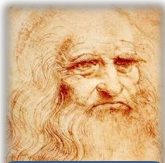
MATHS TOP TRUMPS



Ramanujan

Intelligence:	highest value of x $3x^2 = 5$
Resilience:	$2(x + 3) + (x - 12) < 0$
Speed:	Gradient of line $4x + 2y - 9 = 0$
Greatness:	x value of $3x - y = 7$ $10x + 3y = -2$


MATHS TOP TRUMPS



Da Vinci

Intelligence:	highest value of x $(x - 3)^2 = 13$
Resilience:	$2(x - 3) + (x - 12) < 0$
Speed:	Gradient of line $9x + 6y + 2 = 0$
Greatness:	y value of $2y = 2x - 3$ $3y = x - 1$


MATHS TOP TRUMPS



Alan Turing

Intelligence:	highest value of x $(3x - 1)^2 = 11$
Resilience:	$2(x - 3) + (x - 12) < 0$
Speed:	Gradient of line $-5x + 4y + 2 = 0$
Greatness:	x value of $x + 3y = 11$ $4x - 7y = 6$

MATHS TOP TRUMPS



Aristotle

Intelligence:	highest value of x $6x^2 - 7 = 11x$
Resilience:	$2(x - 3) + (x + 12) < 0$
Speed:	Gradient of line $7x - 2y + 3 = 0$
Greatness:	y value of $4x - 3y = 40$ $2x + y = 5$