To Master

~ Factoring & Distributing ~

$x^2 - x$	
$x^4 - x^2$	
$7^5 - 7^3$	
$z^3 - z$	
$10^{(b+1)}$	
$10^{(b-1)}$	
$a^b - a^{b-1}$	
$pq + pr + qs + rs$	
$x^2 - y^2$	
$x^2 + 2xy + y^2$	
$x^2 - 2xy + y^2$	
$(a+b)^2$	
$a^2 - 1$	
$(x+y)(x+y)$	
$(x-y)(x+y)$	

$(x-y)(x-y)$	
Absolute value equation for e.g. height not 10 or more away from 50. etc.	
$x^2 \geq 64$ compound ineq.	
$p^3 - p$	
$a^b + a^{b+1}$	
$3^5 + 3^6$	
$m^n - m^{n-1}$	
$xw + yw + zx + zy$	
$x^4 - 5x^2 + 4 = 0$ Solve roots	
~~Quadratic~~ equation	Don't need!
~~Discriminant~~ explain >0 <0 $=0$	Don't need!
Direct - linear sequence	
Recursive - linear sequence	
Direct - exponential sequence	
Recursive - exponential sequence	

$x < y$	
↳ Reciprocal if $x>0$ $y>0$	
↳ Reciprocal if $x<0$ $y<0$	
↳ Reciprocal if $x<0$ $y>0$	
Sequence formula for factorial (recursive)	
$\frac{1}{x} + \frac{1}{5y} = \frac{1}{2z}$	
Solve for x $4^{x-1} < 4^x - 120$	
$\frac{x^2}{9} - \frac{4}{y^2} = 12$	
Algebraic representation of remainder	
simplify $\frac{1}{\sqrt{n+1} - \sqrt{n}}$	
$\frac{1}{x} - \frac{1}{x+1} = \frac{1}{x+4}$	

TO MASTER

~ Geometry ~

Sum of interior angles of a polygon?	
Area of a trapezoid	
Area of a Rhombus	
Triangle inequality?	
Pythagorean triples & multiples?	
special right triangles and their sides	
Formula for diagonal of a cube	
Area of equilateral triangle	
Circumference of a circle	
$\frac{60}{360}$ $\frac{240}{360}$ common fractions of 360, for "Arc" length questions	
Circumference of a circle	
Area of a circle	
Given ~~perimeter quad.~~ max area?	Don't need!
Given area ~~quad.~~ minimum perimeter?	Don't need!
~~circle~~ surface area sphere? volume sphere?	

TO MASTER

~ Number Properties ~

Divisibility by 4?	
Divisibility by 8?	
How to determine divisibility of two #s. e.g. is 72 div by 27?	
GCF w/ prime factorization	
LCM/LCD	
$2 \times 5 \times 6$ div. by 4? $2 \times 5 \times 6 \times 10$ div by 8?	
Product of k consecutive integers will be divisible by?	
0^x	
x^0	
# of factors perfect square # of factors non-perfect square	
Exponents of perfect square	
$\sqrt{180}$	
$\sqrt{80} - \sqrt{45}$	
$\frac{4}{\sqrt{2}}$	
$\frac{4}{3-\sqrt{2}}$	
Express remainder algebraically	