Sonolumen (2017)

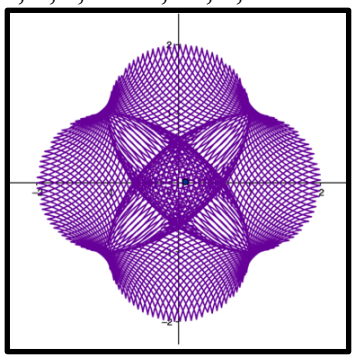
Lee Weisert

Documentation and Listening Guide

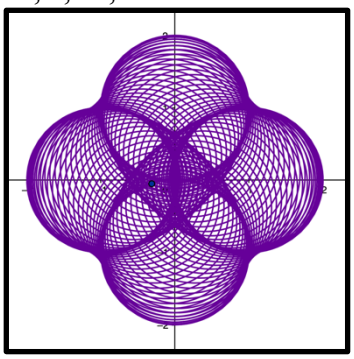
"Clover" Equation

$x = \cos(at) - \cos^3(bt)$
$y = \sin(ct) - \sin^3(dt)$

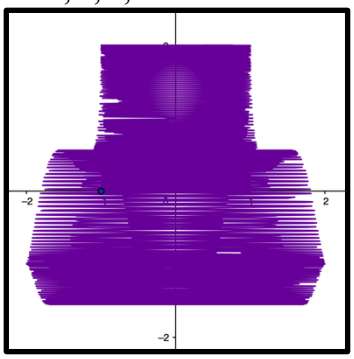
a, b, c, d = 1, 80, 1, 80



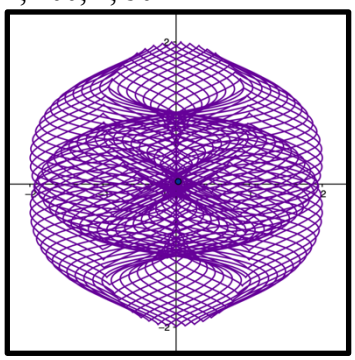
80, 1, 80, 1



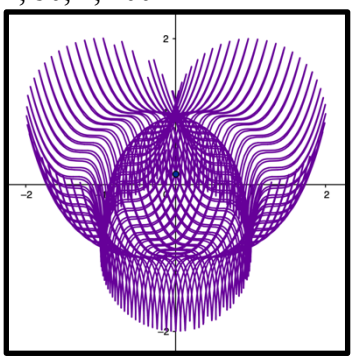
1600, 1, 2, 3



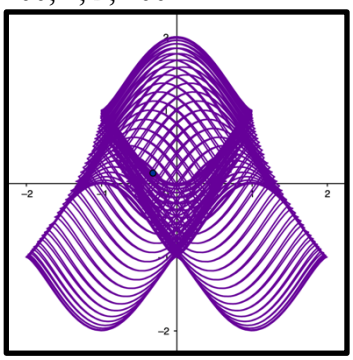
1, 100, 1, 50



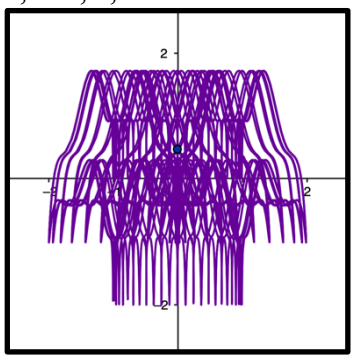
1, 50, 1, 100



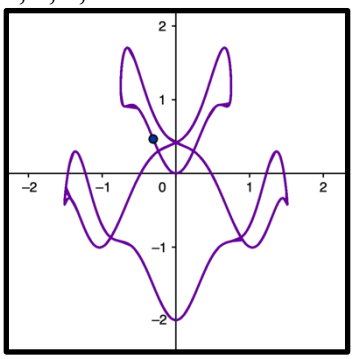
100, 1, 2, 100



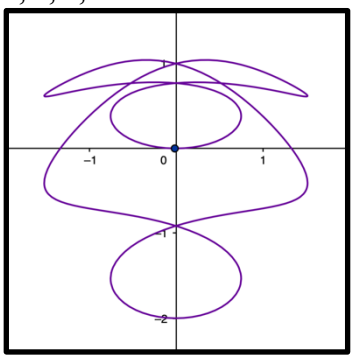
2, 100, 1, 50



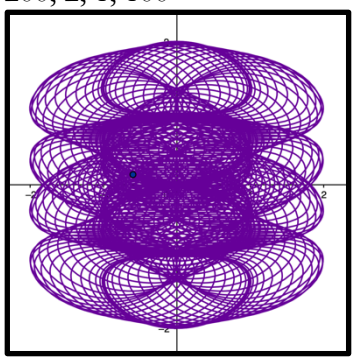
2, 1, 1, 4



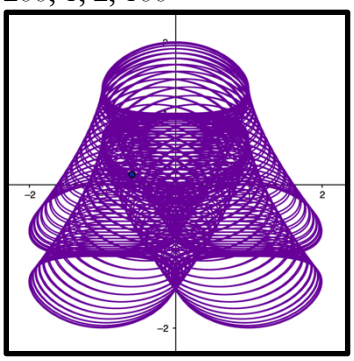
4, 2, 1, 2



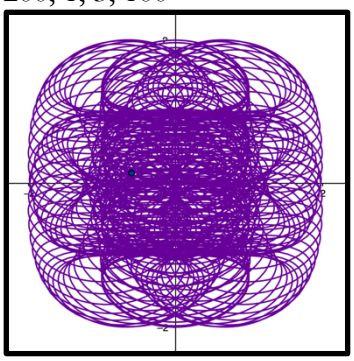
200, 2, 1, 100



200, 1, 2, 100

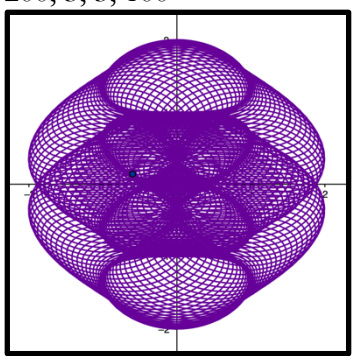


200, 1, 3, 100

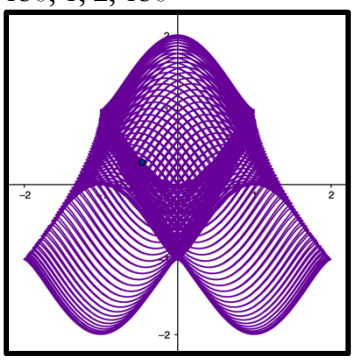


"Clover" Equation, cont.

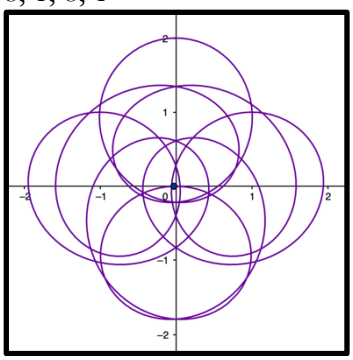
200, 3, 3, 100



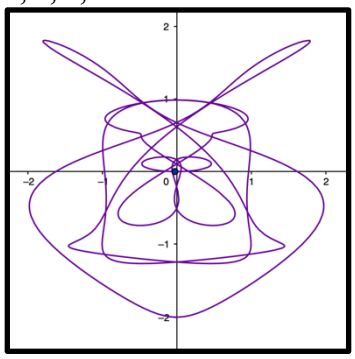
150, 1, 2, 150



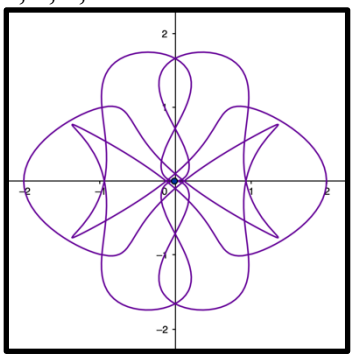
8, 1, 8, 1



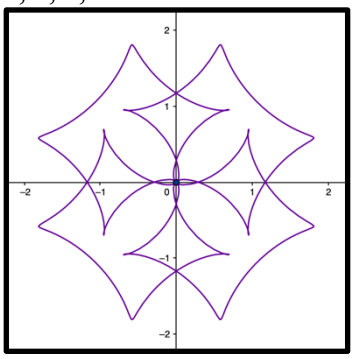
7, 6, 5, 4



3, 5, 7, 1



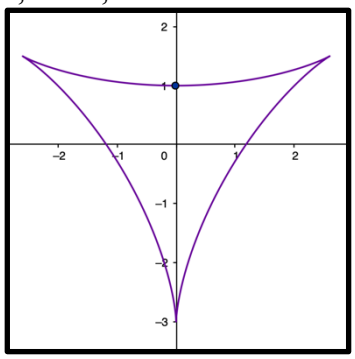
1, 5, 1, 5



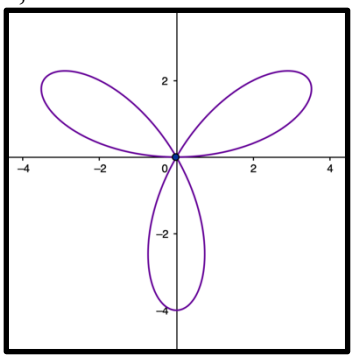
"Cycloid" Equation

$x = [a]\sin(t) + (b)\sin[t(a)]$
$y = [a]\cos(t) - (b)\cos[t(a)]$

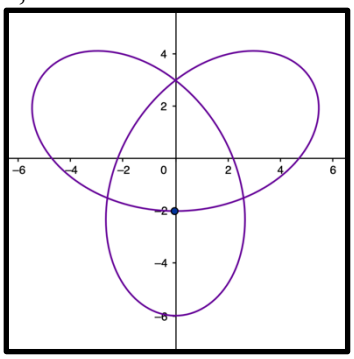
a, b = 2, 1



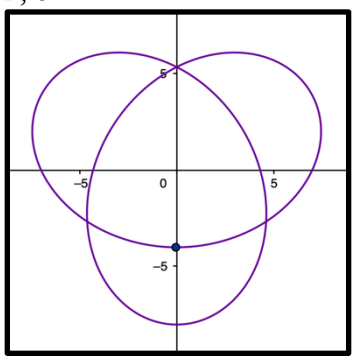
2, 2



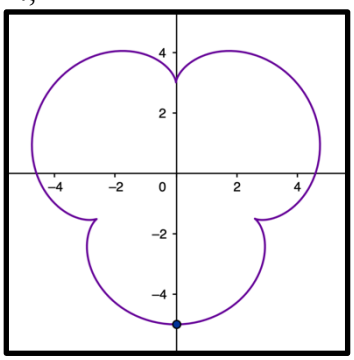
2, 4



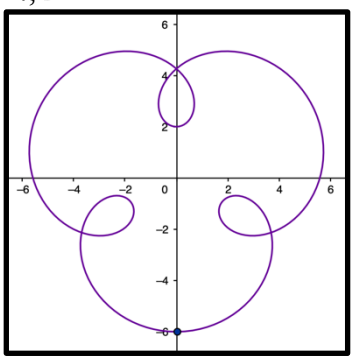
2, 6



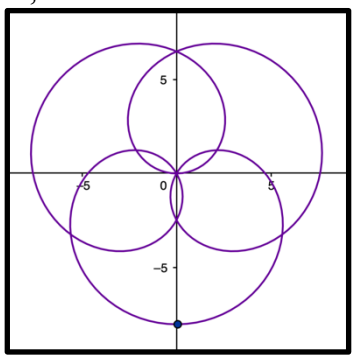
-4, 1



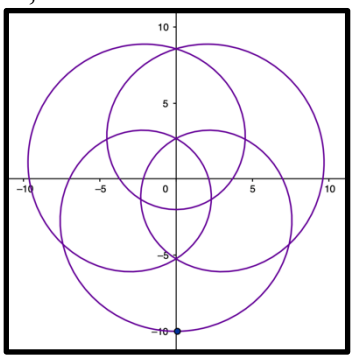
-4, 2



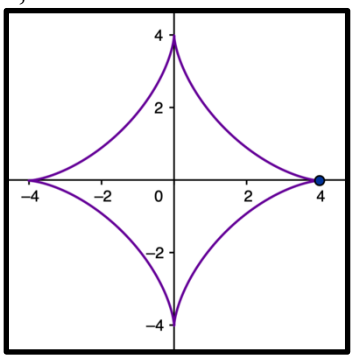
-4, 4



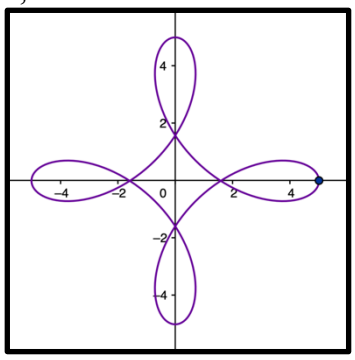
-4, 6



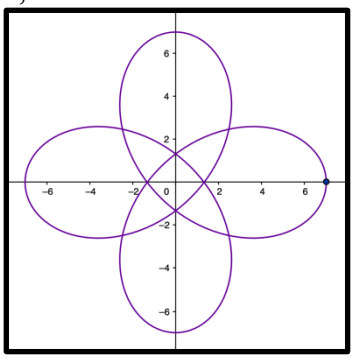
3, 1



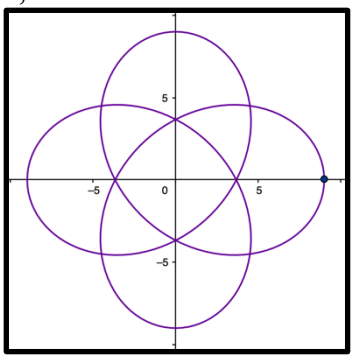
3, 2



3, 4

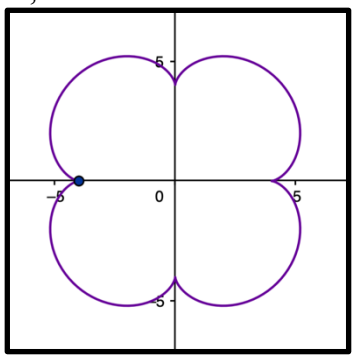


3, 6

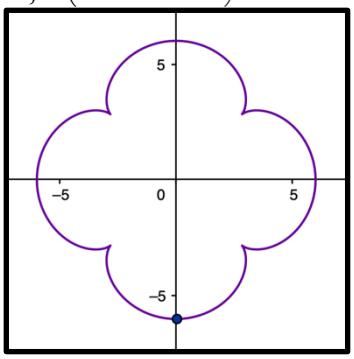


"Cycloid" Equation, continued

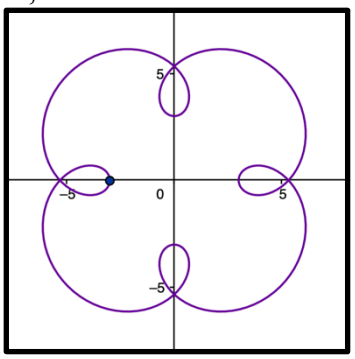
-5, 1



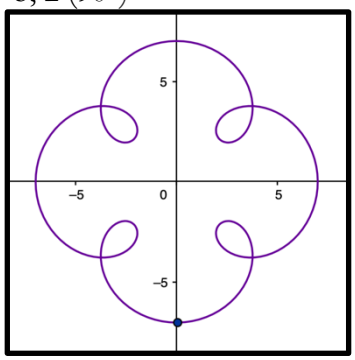
-5, 1 (90° rotation)



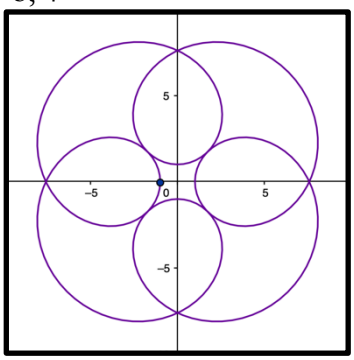
-5, 2



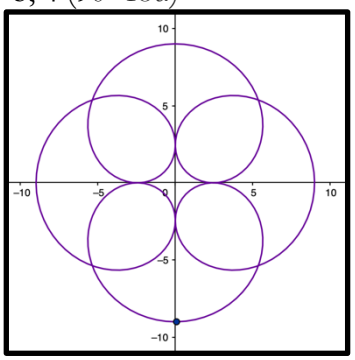
-5, 2 (90°)



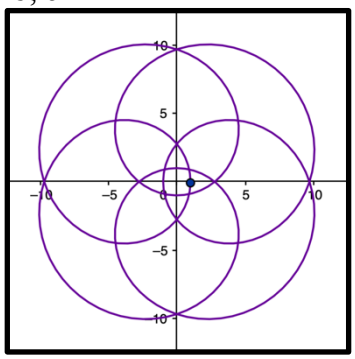
-5, 4



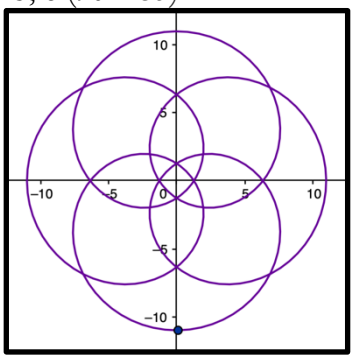
-5, 4 (90° rot.)



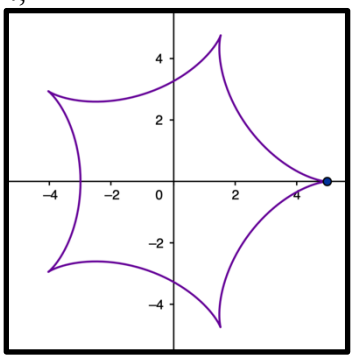
-5, 6



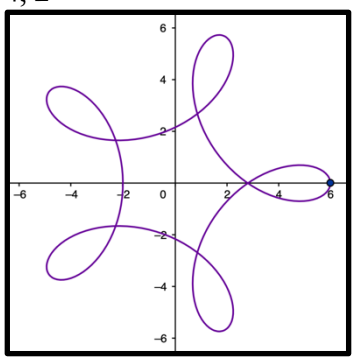
-5, 6 (90° rot.)



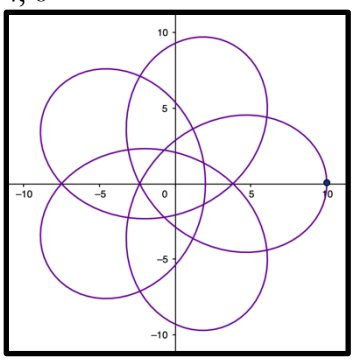
4, 1



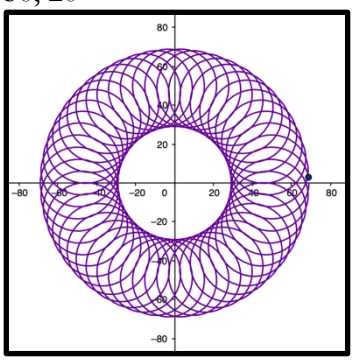
4, 2



4, 6

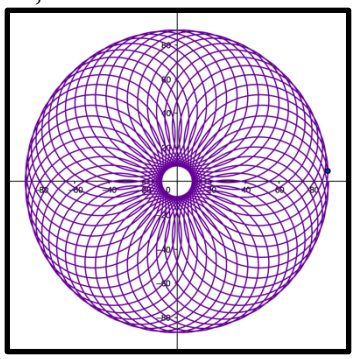


50, 20

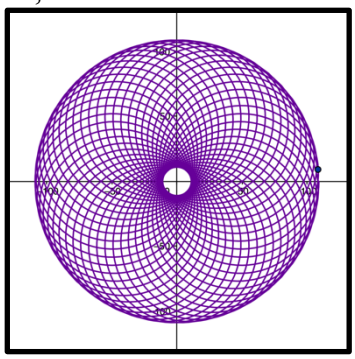


"Cycloid" Equation, continued

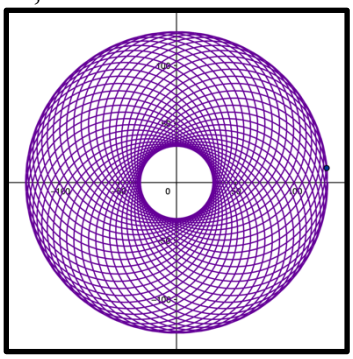
50, 40



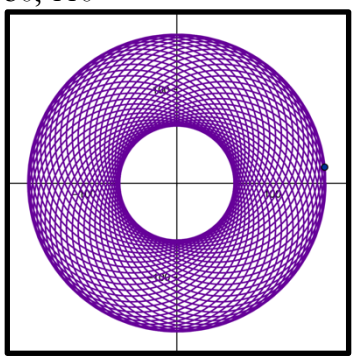
50, 60



50, 80



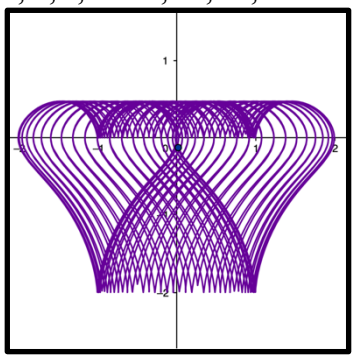
50, 110



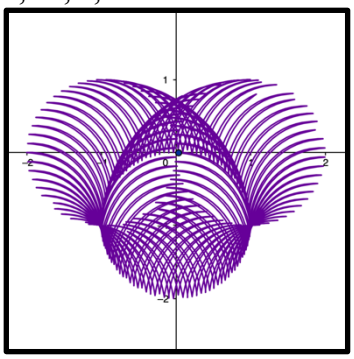
"ZoSo" Equation $x = \cos(at) - \cos^3(bt)$

$y = \sin(ct) - \sin^4(dt)$

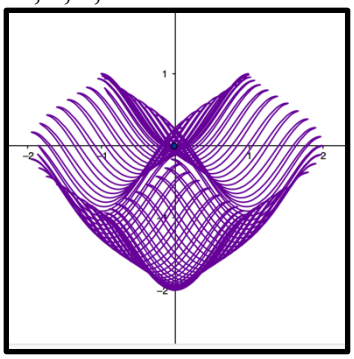
a, b, c, d = 1, 40, 40, 40



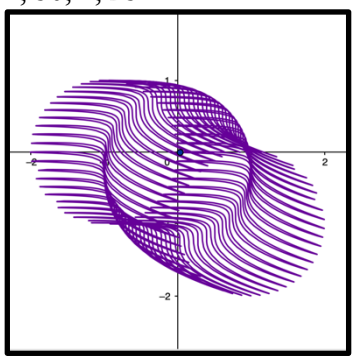
1, 50, 1, 50



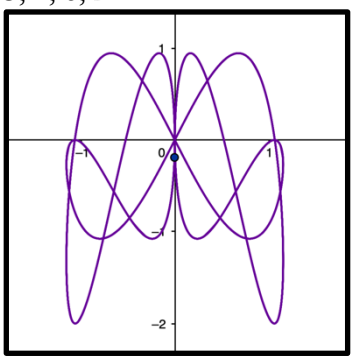
50, 1, 1, 50



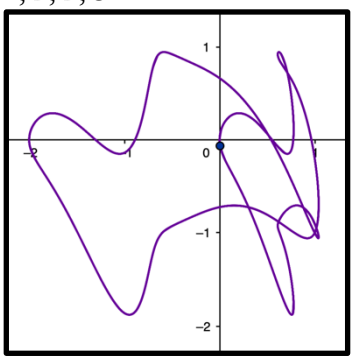
1, 50, 1, 25



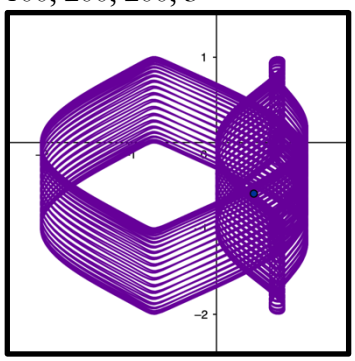
3, 1, 6, 2



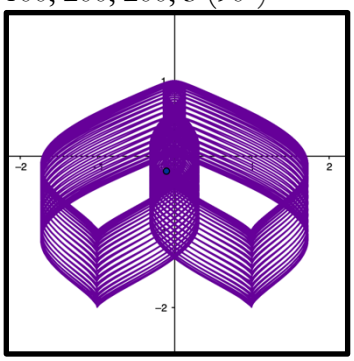
1, 2, 2, 3



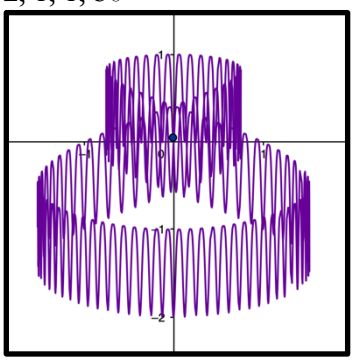
100, 200, 200, 3



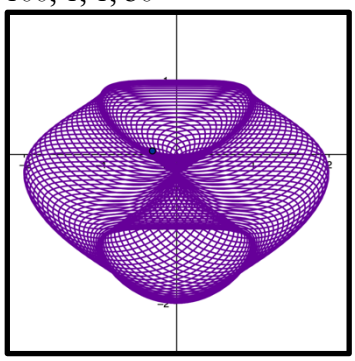
100, 200, 200, 3 (90°)



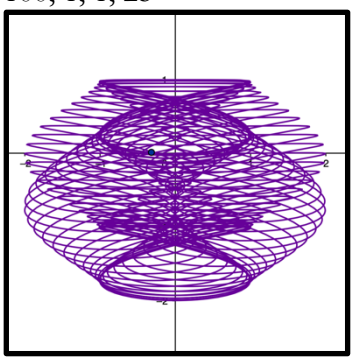
2, 1, 1, 50



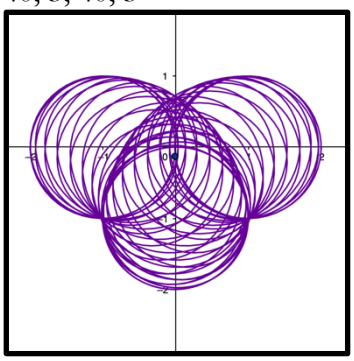
100, 1, 1, 50



100, 1, 1, 25

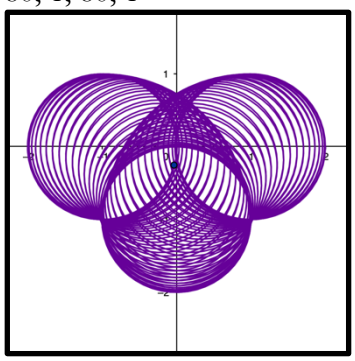


40, 3, 40, 3

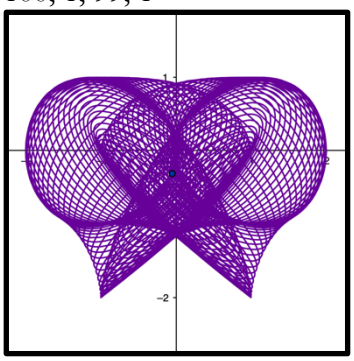


"ZoSo" Equation, continued

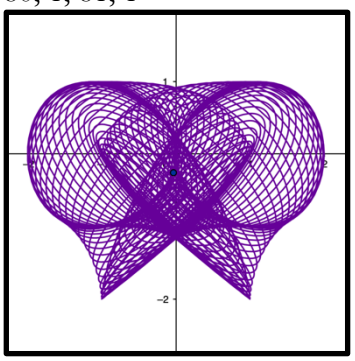
80, 1, 80, 1



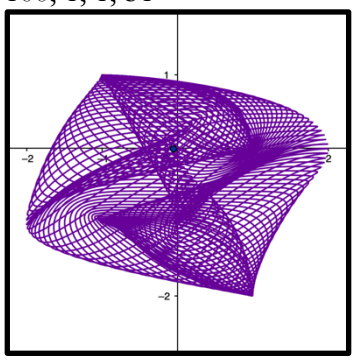
100, 1, 99, 1



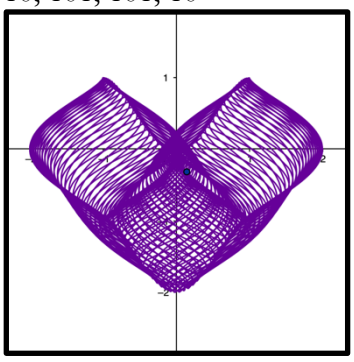
80, 1, 81, 1



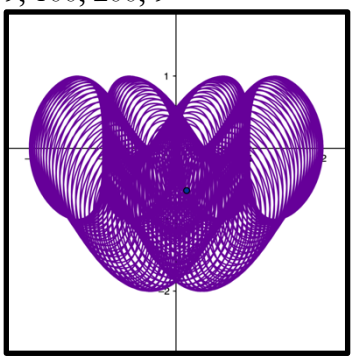
100, 1, 1, 51



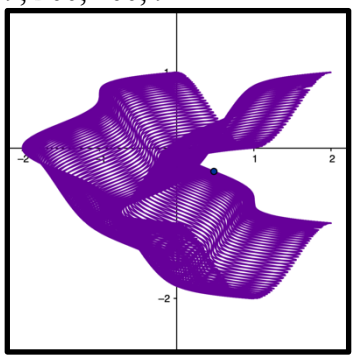
10, 101, 101, 10



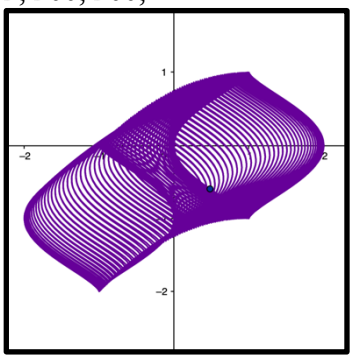
9, 100, 200, 9



9, 200, 100, 9



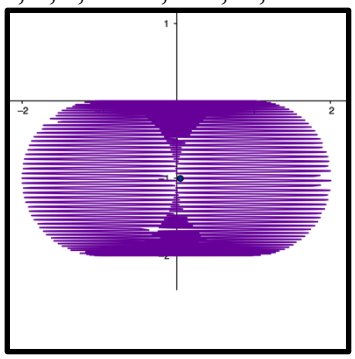
2, 200, 200, 1



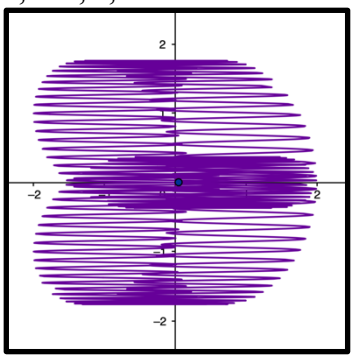
"Mandala" Equation

$x = \cos(at) - \cos(bt)$
$y = \sin(ct) - \sin(dt)$

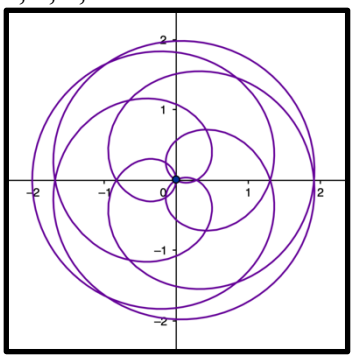
a, b, c, d = 1, 100, 0 , 1



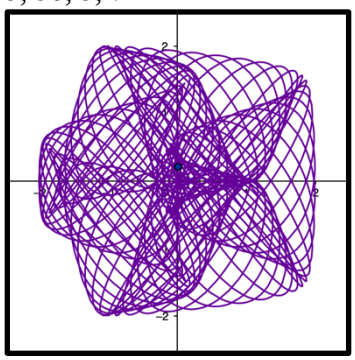
2, 100, 1, 2



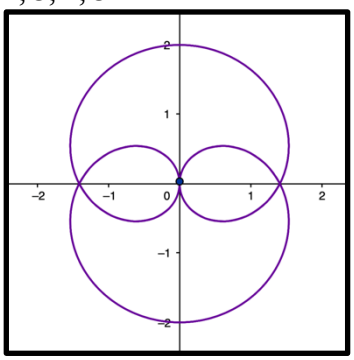
7, 4, 4, 7



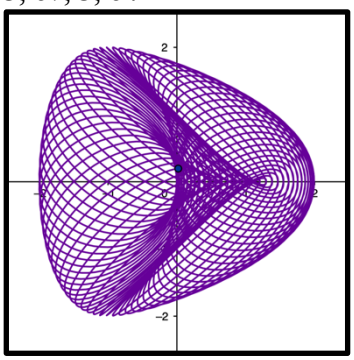
5, 56, 5, 71



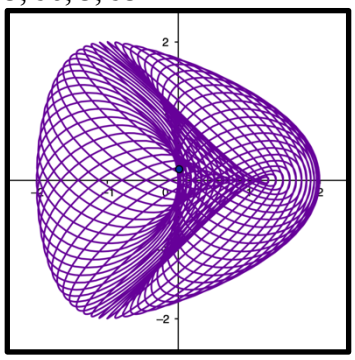
1, 3, 1, 3



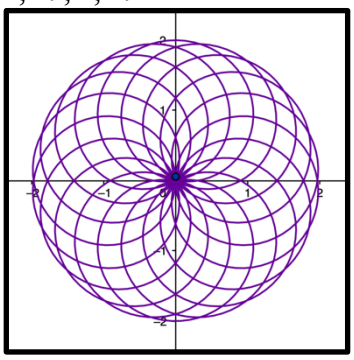
3, 67, 3, 64



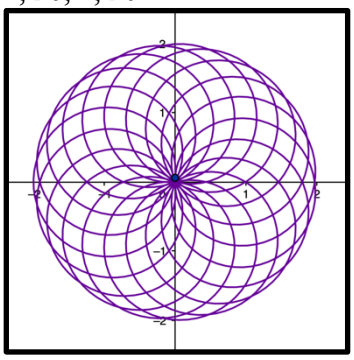
3, 56, 3, 53



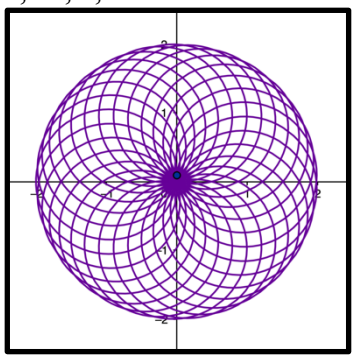
1, 19, 1, 19



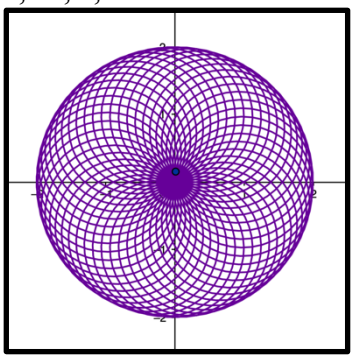
1, 20, 1, 20



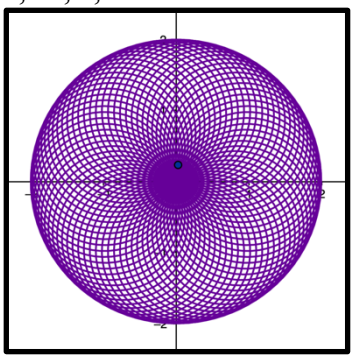
1, 30, 1, 30



1, 50, 1, 50

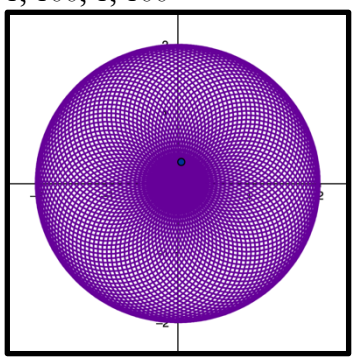


1, 75, 1, 75

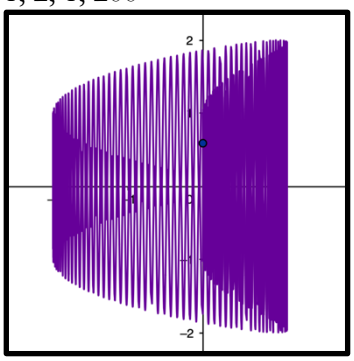


"Mandala" Equation, continued

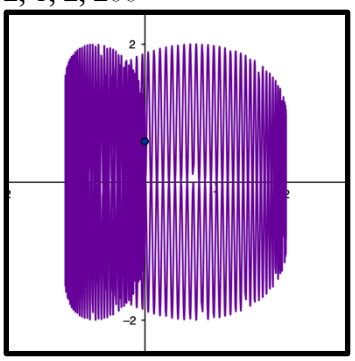
1, 100, 1, 100



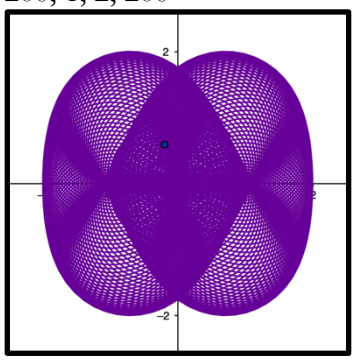
1, 2, 1, 200



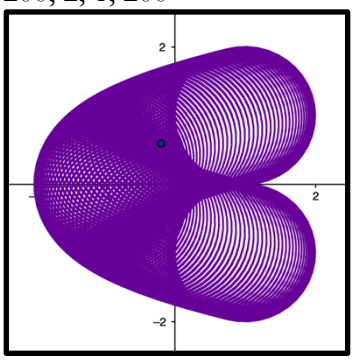
2, 1, 2, 200



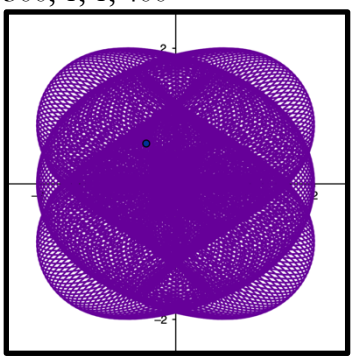
200, 1, 2, 200



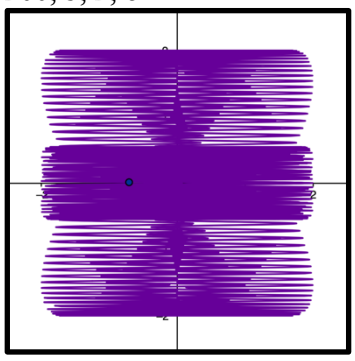
200, 2, 1, 200



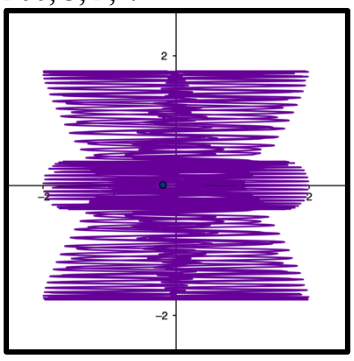
300, 1, 1, 400



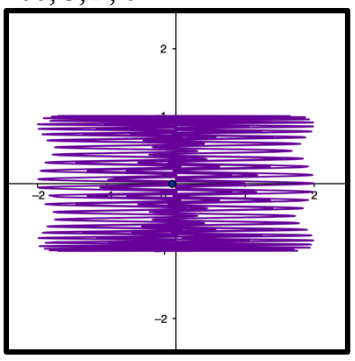
200, 5, 2, 6



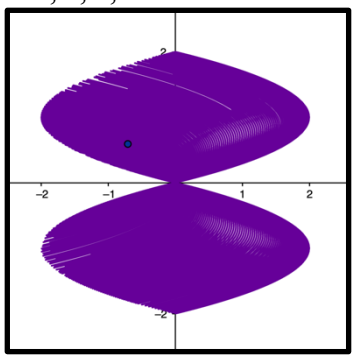
200, 3, 2, 4



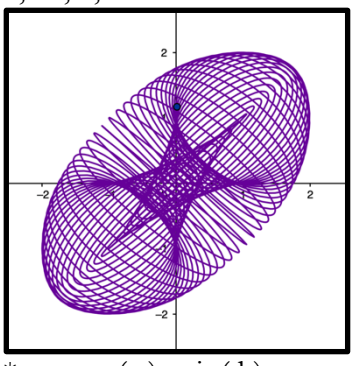
100, 3, 2, 0



400, 2, 1, 200

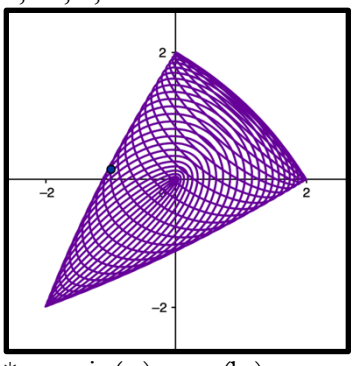


3, 56, 3, 53 *



* y = cos(ct) - sin(dt)

3, 56, 3, 53 *

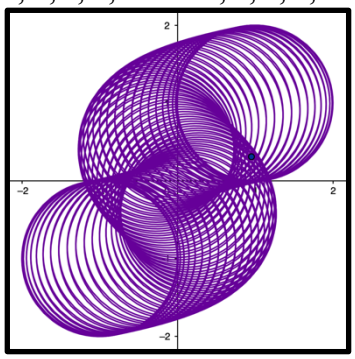


* x = sin(at) - cos(bt)

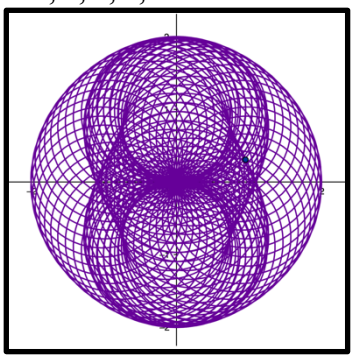
"Mobius" Equation

$x = \cos(at) - \cos(bt)\sin(ct)$
$y = \sin(dt) - \sin(et)$

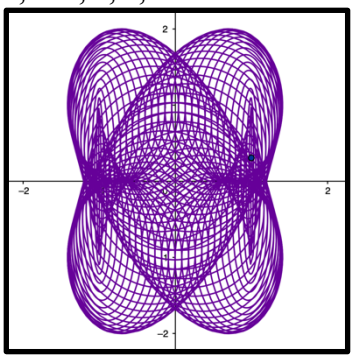
a, b, c, d, e = 100, 2, 1, 1, 100



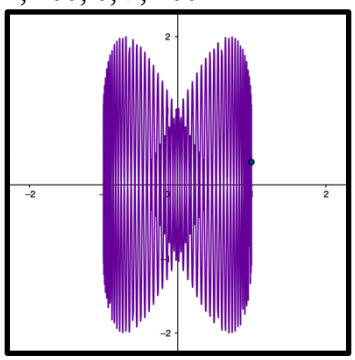
100, 2, 1, 2, 100



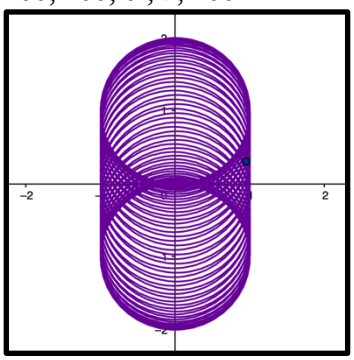
1, 100, 1, 2, 100



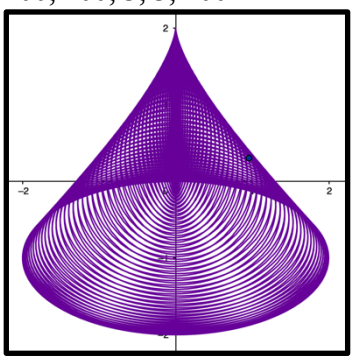
1, 100, 0, 2, 100



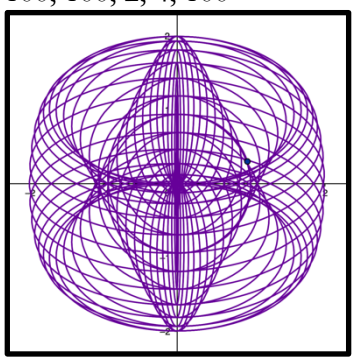
100, 100, 0 , 2, 100



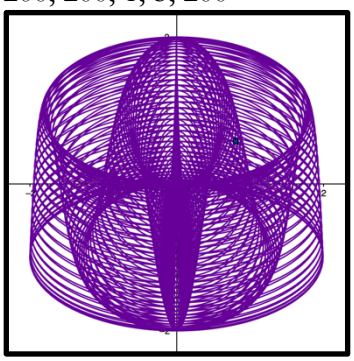
100, 100, 3, 3, 100



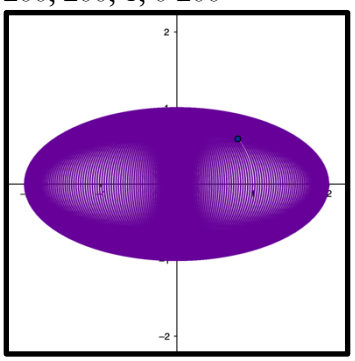
100, 100, 2, 4, 100



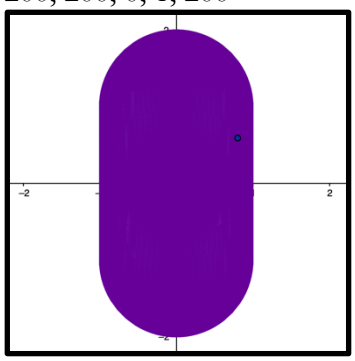
200, 200, 1, 5, 200



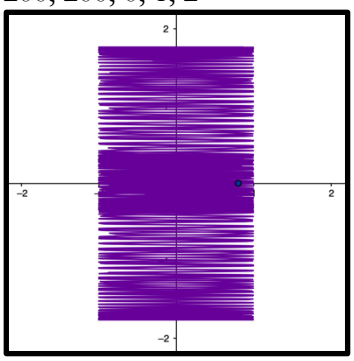
200, 200, 1, 0 200



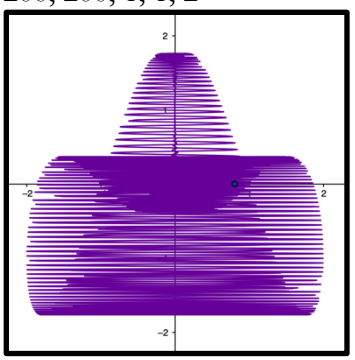
200, 200, 0, 1, 200



200, 200, 0, 1, 2

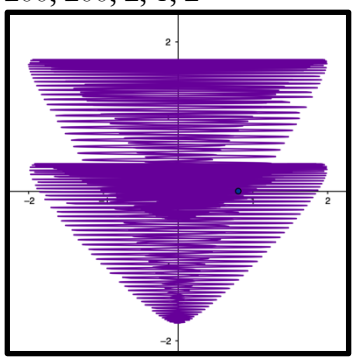


200, 200, 1, 1, 2

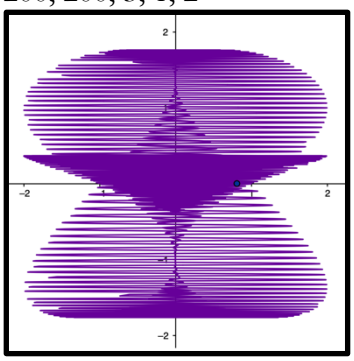


"Mobius" Equation, continued

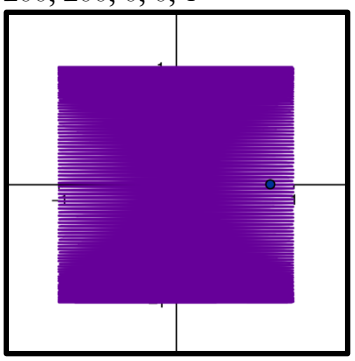
200, 200, 2, 1, 2



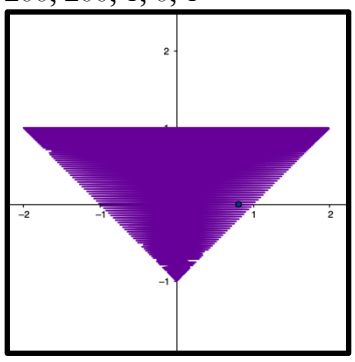
200, 200, 3, 1, 2



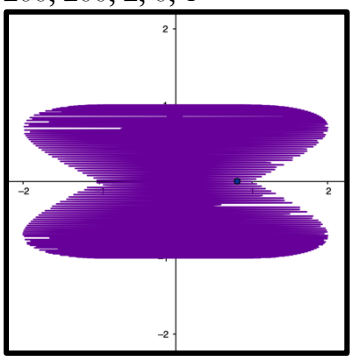
200, 200, 0, 0, 1



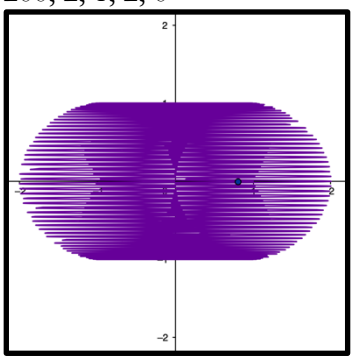
200, 200, 1, 0, 1



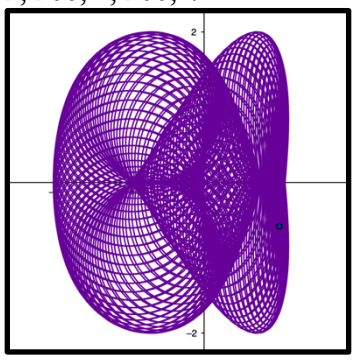
200, 200, 2, 0, 1



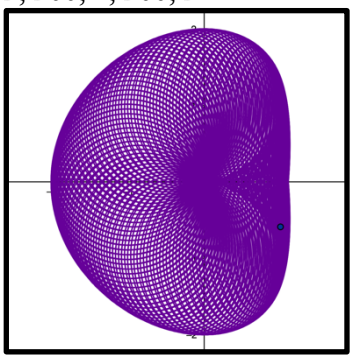
200, 2, 1, 2, 0



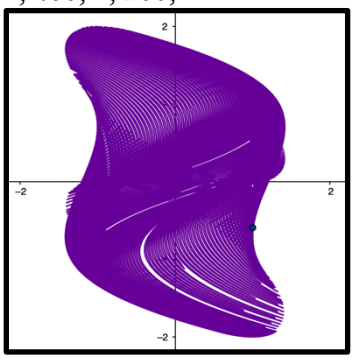
2, 200, 1, 200, 4



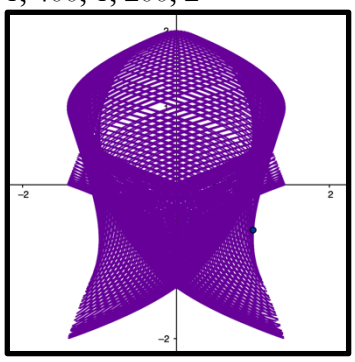
2, 200, 1, 200, 2



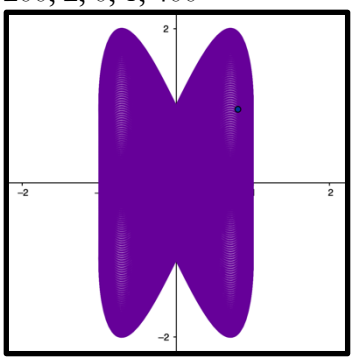
1, 400, 1, 200, 1



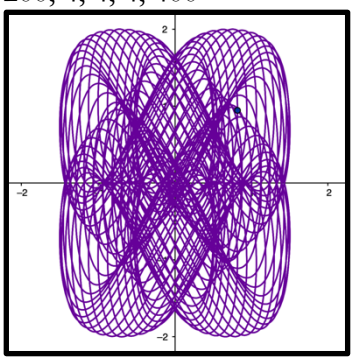
1, 400, 1, 200, 2



200, 2, 0, 1, 400



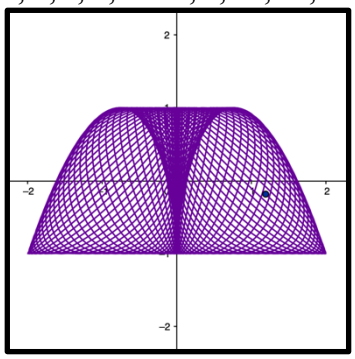
200, 4, 4, 4, 400



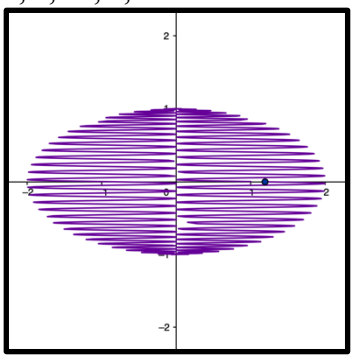
"Hourglass" Equation

$x = \cos(at) - \cos(bt)\sin(ct)$
$y = \sin(dt) - \sin(et)$

a, b, c, d, e = 1, 1, 60, 58, 0



1, 1, 60, 1, 0



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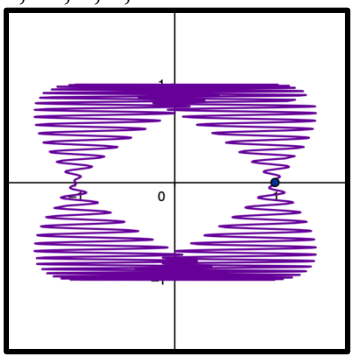
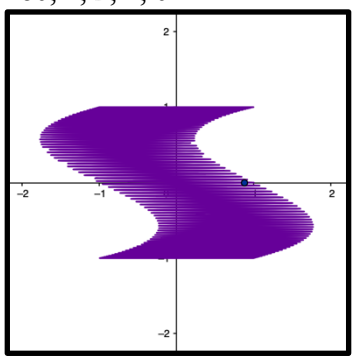
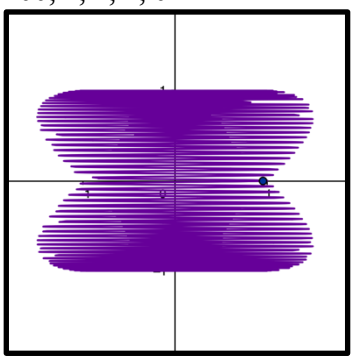


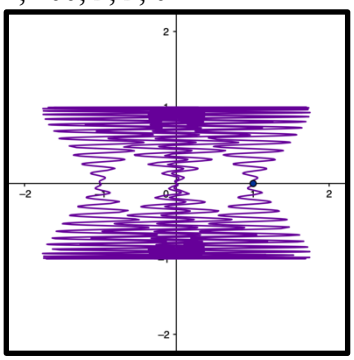
160, 1, 2, 1, 0



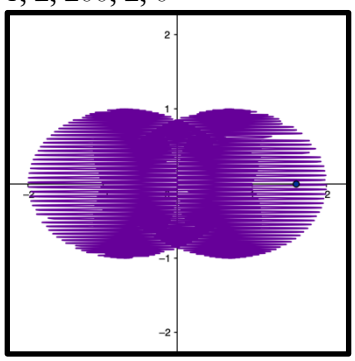
100, 1, 1, 1, 0



1, 100, 2, 2, 0



1, 2, 200, 2, 0



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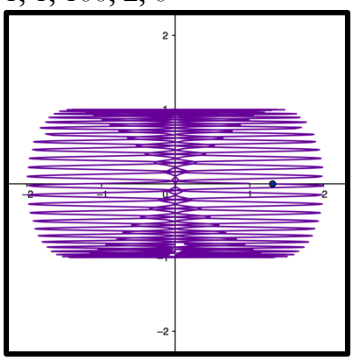
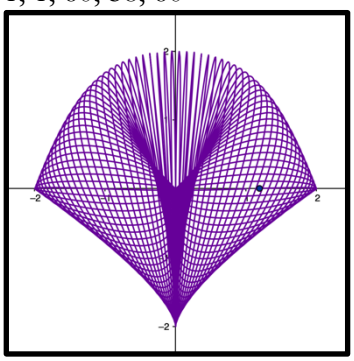


1, 1, 60, 58, 60



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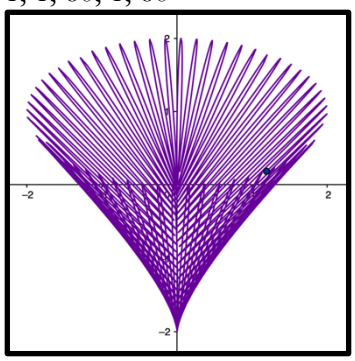
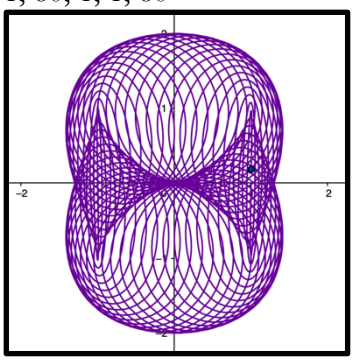
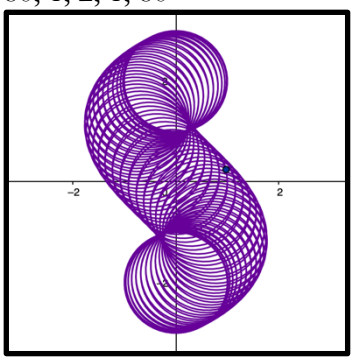


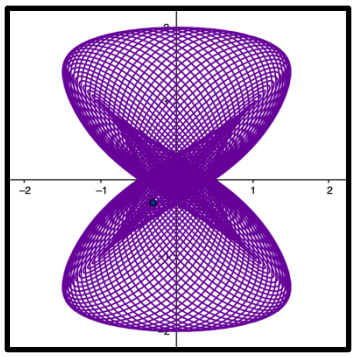
1, 60, 1, 1, 60

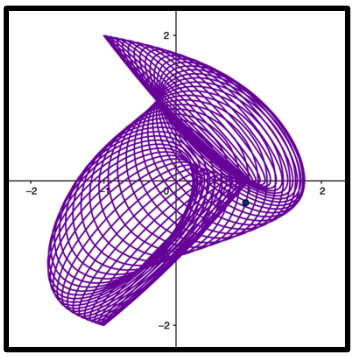


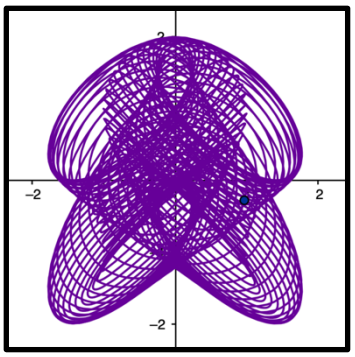
80, 1, 2, 1, 80

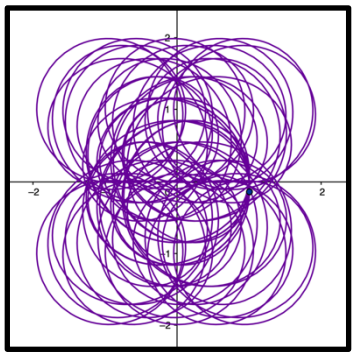


"Hourglass" Equation, continued



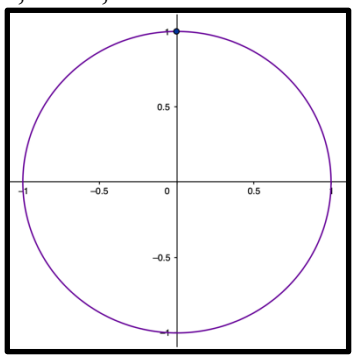




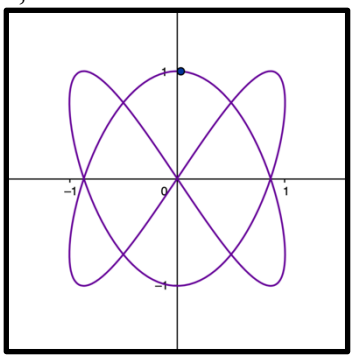


Circle/Lissajous Equation x = sin(at)
y = cos(bt)

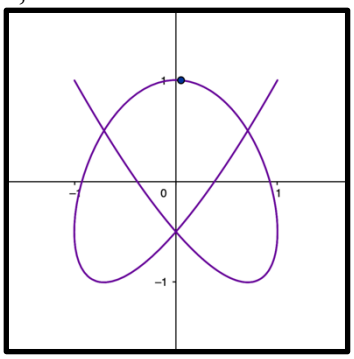
a, b = 1, 1



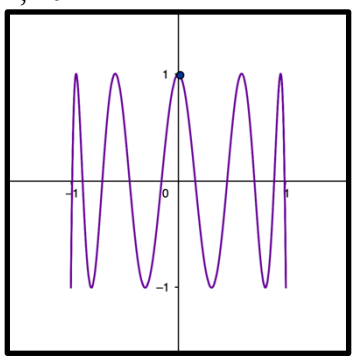
2, 3



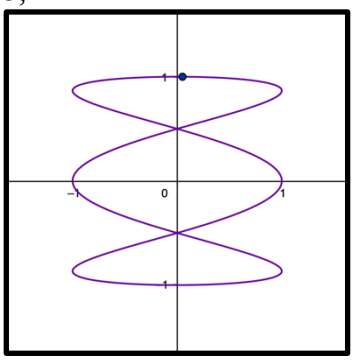
3, 4



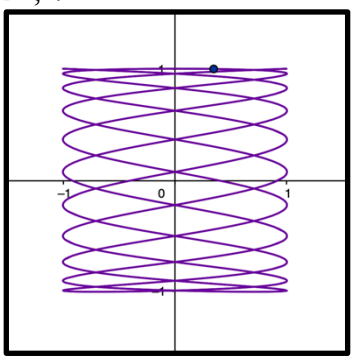
1, 10



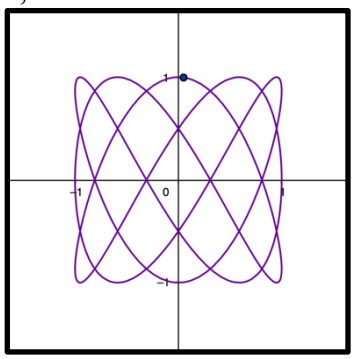
3, 1



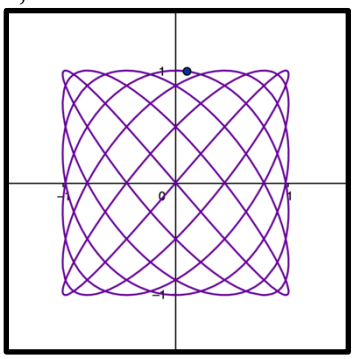
21, 4



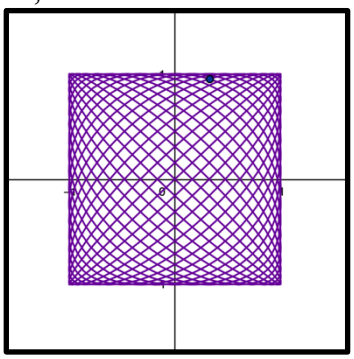
3, 5



6, 7

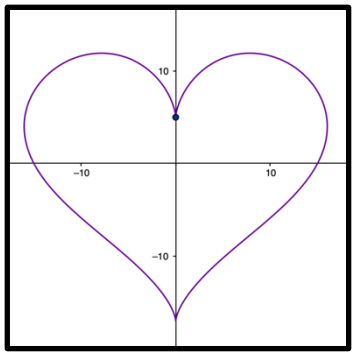


19, 20



Heart Equation

$x = 16\sin(t)^3$
$y = 13\cos(t) - 5\cos(2t) - 2\cos(3t) - \cos(4t)$



Butterfly Equation

$x = \sin(t)(e^{\cos(t)} - 2\cos(4t) - \sin^5(t/12))$
$y = \cos(t)(e^{\cos(t)} - 2\cos(4t) - \sin^5(t/12))$