Curva original:

g(t) = (6cos(t) – 2cos(9t/2), 6sen(t) – 2sen(9t/2))

t in [0, 4pi[

Vetor tangente (derivada geral):

g’(t) = (-6sen(t) + 2sen(9t/2)\*9/2, 6cos(t) – 2cos(9t/2)\*9/2)

g’(t) = (-6sen(t) + 9sen(9t/2), 6cos(t) – 9cos(9t/2))

Pontos com tangente horizontal:

-6sen(t) + 9sen(9t/2) != 0

6cos(t) – 9cos(9t/2) = 0

Pontos com tangente vertical:

-6sen(t) + 9sen(9t/2) = 0

6cos(t) – 9cos(9t/2) != 0