

Lecture 33: Worksheet

Calculus in Music

1 How do you think the function

$$f(x) = \sin(10000\sqrt{x})$$

sounds?

2 What about

$$f(x) = \sin(10000x^2)?$$

3 And how about

$$f(x) = \arctan(x) \sin(\tan(x)1000x)?$$

4 And finally

$$\sin(x) \sin(1000x)?$$