

## Quiz 4

1) Find the geometric series representation of the function:

$$f(x) = \frac{3}{2+x^2}$$

Recall that

$$\sum_{n=0}^{+\infty} ar^n = \frac{a}{1-r}, r \in (-1,1)$$

2) Using the result above find the power series representation of the following function:

$$g(x) = \frac{-6x}{(2+x^2)^2}$$

Explain your answers.