

1 Assignment on «Patterns & Replacements»

Problem 1.1. Create a function with the same functionality as `Coefficient` using replacements.

```
myCoefficient[expr_, form_] := ...
```

Problem 1.2. Construct a `ComplexityFunction` that prefers $\sin^n(x)$ and $\cos^n(x)$ instead of $\sin(nx)$ and $\cos(nx)$. Simplify $\cos(4x)$ using it.

```
Simplify[Cos[4z], ComplexityFunction -> f[#]&]
```