Topic: **Creation of fixed-sign, constant-sign and alternating-sign functions**

Construct functions of the following look:

1. $x \in R^2$, $V(x) = 7x_1^2 + 3x_2^2$

2. $x \in R^2$, $V(x) = -7x_1^2 - 3x_2^2$

3. $x \in R^1$, $V(x) = 9x^2$

4. $x \in R^2$, $V(x) = 4x_1^2 + 4x_2^2$

5. $x \in R^1$, $V(x) = 5x^3$.