Mathematics 2	**February 28 2019**

Weekly test #2

Name: Surname:

Exercise 1

Calculate the following determinant:

$$\begin{vmatrix} 0 & 1 & 1 \\ 0 & 1 & 3 \\ 2 & 2 & 17 \end{vmatrix}$$

Write your solution here:

Exercise 2

Determine values k for which $\vec{v} = (-k, 1, -1, -2)$ is orthogonal to $\vec{w} = (3, k, -1, 2)$.

Write your solution here:

Exercise 3

Solve the following limit

$$\lim_{x \to 1} \frac{\int_1^x e^{-t^2} dt}{x - 1}$$

Write your solution here: