

## LIST OF FORMULAS TO SECTIONS 2 AND 3

$2(gh)$	$\mathbb{R}^2 \ni \lambda \mapsto \langle \lambda, f \rangle = \lambda_1 f_1 + \lambda_2 f_2 : \Omega \rightarrow \mathbb{R}$	$\mathbb{R}^2 \ni \lambda \mapsto \Lambda(\lambda) = \ln \int e^{\langle \lambda, f \rangle} d\mu$	$\text{grad } \Lambda(\lambda) \in \mathbb{R}^2$
$3.M$	$L \ni f : \Omega \rightarrow \mathbb{R}$	$L \ni f \mapsto \Lambda(f) = \ln \int e^f d\mu$	$\text{grad } \Lambda(f) \in L^*$
$3.P$	$K \ni h : \Omega \rightarrow \mathbb{R}; f = -\beta h$	$\Lambda(-\beta h) = \ln \int e^{-\beta h} d\mu$	$\text{grad } \Lambda(-\beta h) = x \in L^*$
$2(gh)$	$\mathbb{R}^2 \ni a \mapsto \Lambda^*(a) = \sup_{\lambda \in \mathbb{R}^2} (\langle \lambda, a \rangle - \Lambda(\lambda))$	$\Lambda^*(\text{grad } \Lambda(\lambda)) = \langle \lambda, \text{grad } \Lambda(\lambda) \rangle - \Lambda(\lambda)$	
$3.M$	$L^* \ni x \mapsto \Lambda^*(x) = \sup_{f \in L} (\langle f, x \rangle - \Lambda(f))$	$\Lambda^*(\text{grad } \Lambda(f)) = \langle f, \text{grad } \Lambda(f) \rangle - \Lambda(f)$	
$3.P$		$S(x) = -\Lambda^*(x) = \beta \langle h, x \rangle + \Lambda(-\beta h)$	
$2(gh)$	$\nu = \exp(\langle \lambda, f \rangle - \Lambda(\lambda)) \cdot \mu$	$\nu^n = \exp n(\langle \lambda, f^{(n)} \rangle - \Lambda(\lambda)) \cdot \mu^n$	$\int f d\nu = \text{grad } \Lambda(\lambda)$
$3.M$	$\nu = \exp(f - \Lambda(f)) \cdot \mu$	$\nu^n = \exp n(f^{(n)} - \Lambda(f)) \cdot \mu^n$	$\int g d\nu = \langle g, \text{grad } \Lambda(f) \rangle$
$3.P$	$\nu = \frac{e^{-\beta h} \cdot \mu}{\int e^{-\beta h} d\mu}$	$\nu^n = \frac{e^{-\beta n h^{(n)}} \cdot \mu^n}{\int e^{-\beta n h^{(n)}} d\mu^n}$	$\int g d\nu = \langle g, x \rangle$

“2(gh)” means: Section 2, subsections 2g and 2h;

“3.M” means: Section 3, the mathematical style;

“3.P” means: Section 3, the physical style.