Physics 3410 Quiz 4 Please write the letter of the correct answer in the box provided. Name:							
1. Wha	t letter do v	we use to r	epresent er	ntropy?			
A) E		C) N	•	Ε) Ω			
2. Two	cups of wa	ter have ar	n average te	emperature of 10°C. Which has the larger entropy?			
	hot B	warm	C) Both h	ave the same entropy.			
3. Γ(2)=	=1 and Γ(3)	=2. What	is Γ(4)?				
	B) 3						
4. The s A) R			nensional s D) <i>R</i>⁵	phere with radius R is proportional to E) <i>R</i> ⁶			
Consider the	e multiplici	ty $oldsymbol{\Omega}$ of an $oldsymbol{n}$	ideal gas of	<u>six</u> particles in a volume V.			
$\int 5. \Omega is$	proportion	al to	D) V ¹²				
A) V	B) V ²	C) V ⁶	$D) V^{12}$	E) V^{18}			
6 O is	proportion	al to the su	rface area o	of adimensional sphere with radius $\sqrt{2}$ mU.			
A) 3	B) 6	C) 12	D) 18	or a differisional spriere with radias 121110.			

Please	write the lett	er of the corr		Physics 34 the box prov	
D] 1. What l A) E	etter do w B) H	e use to re C) N	epresent er D) S	ntropy? E) Ω
В		B)		•	emperature of 10°C. Which has the larger entropy? ave the same entropy.
C	$\begin{bmatrix} 3. \ \Gamma(2)=1 \\ A) 2 \end{bmatrix}$	and Γ(3)= B) 3	2. What i C) 6	s Γ(4)? D) 24	
C] 4. The su A) <i>R</i>	rface area B) <i>R</i>²	of a 5-din C) <i>R</i>⁴	nensional s D) <i>R</i>⁵	phere with radius R is proportional to E) <i>R</i>⁶
Cor		• •		deal gas of D) V ¹²	<u>six</u> particles in a volume V. E) V ¹⁸
D	6. Ω is pr A) 3	oportional B) 6	to the su C) 12	rface area (D) 18	of adimensional sphere with radius √2mU.