



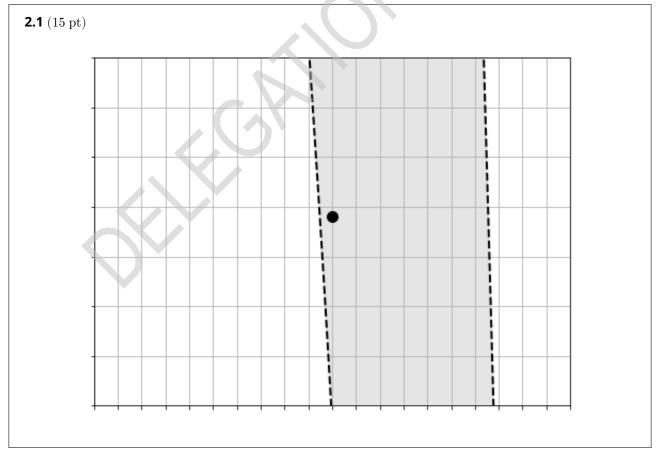
# Data Analysis 2: Stars and Exoplanets (75 points)

#### Part 1 (20 points).

**1.1** (20.0 pt)

Luminosity of the star	Radius of the star	Mass of the star	Mean planet's orbital radius	Radius of the planet in Jupiter's radius
$\begin{matrix} L_\star \\ [L_\odot] \end{matrix}$	$\begin{array}{c} R \\ [R_{\odot}] \end{array}$	$\begin{array}{c} M_{\star} \\ [M_{\odot}] \end{array}$	a [ <i>au</i> ]	$\begin{bmatrix} R_p \\ [R_J] \end{bmatrix}$

#### Part 2 (25 points).







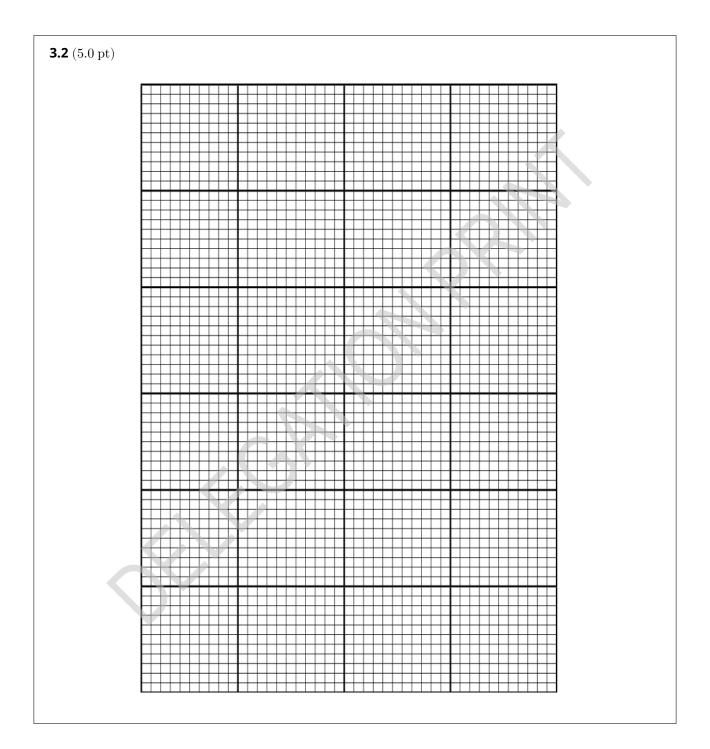
<b>2.2</b> (10.0 pt)			
	Planet's Name	In habitable zone? YES / NO	
	Tayrona		
	Iguaque		
	Gorgona		
	Amacayacu		
	Malpelo		
	Pisba		
	Tatamá		

### Part 3 (30 points).

Low-mass sample	Sample size	$\mu$	σ	$\mu + \sigma$	No. of planets to exclude
Full / Original	38				
1st subsample					
2nd subsample					
Final subsample		-	-	-	-











$T_{eff}$	Min.	1st Quartile	Median 2nd Quartile	3rd Quartile	Max
LME					
HME					
HME -		GA			
LME -		5400 5600	5800 60	00 6200	6400
LME -			5800 60 vs Temperature	00 6200	