# WELCOME TO MARS!

Induding:

- Map
- \_ How to calculate distances
- How to evacuate (if needed)

#### MAP OF MARS COLONIES

MARSORID CHUMPOLAND (0,150) (150/100) WEUZ VOLCANO WELL 3 (0/400) (100/100) (50,100) WELL (0,50) FRONFORGE (100,50) YHARNAM LOAD (0,0)

### CALCULATING DISTANCES

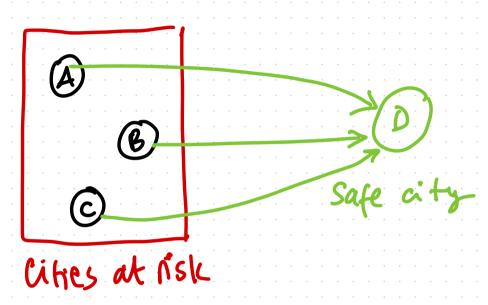
Given two points -  $P_1$  and  $P_2$  - where each point is defined by its coordinates (x,y), then we can calculate the distance as:

$$\int_{0}^{\infty} P_{2}(x_{1}, y_{2})^{2} dx_{1} + (y_{1} - y_{2})^{2}$$

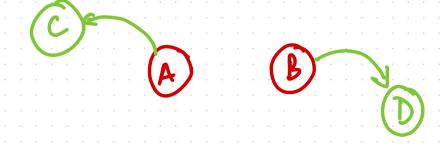
P1 (x1, x2)

#### EVACUATION OPTIONS

1) EVACUATE ALL POPULATION AT RISK 10 A SINGLE SAFE CITY



2) EVACUATE EACH CITY AT RISK TO THEIR CLOSEST SAFE CITY



## Extra Material and tips

of there are many ways to do each exercise

of grades, the easier it is to fall in the lower grades.

of Grade distribution becomes thinner if you shere your work

safety range vs. safety range

			٠		٠		٠																															
									٠		•		٠					٠	٠	٠			٠										٠		٠	٠		
	٠		٠		٠		٠	٠			٠	٠		٠		٠	٠	٠			٠	٠				٠		٠		٠		٠	٠	٠	٠	٠		
	٠	•	٠	٠	٠	٠	٠	٠	•			٠	•	٠	•	٠	٠	٠	•	٠	٠	٠	•	•	٠	•	•	٠	٠	٠		٠	٠	٠		٠	•	•
•	٠		٠	٠	٠	٠	٠	•	•			٠	•	٠	•	٠		٠	•		٠	٠	•	•	٠	٠		•	٠	٠			٠	٠		٠	•	
			٠		٠		٠	٠			•	٠		٠		٠	٠	٠			٠	٠						٠				٠	٠	٠		٠		
												٠		٠				٠		٠	٠	٠											٠		٠	٠		
									٠		•		٠					٠	٠	٠			٠										٠		٠	٠		
•		•	٠		٠		٠			•	•									٠						•	•				•							
	•	•	•	•	•	•	•	•	•	•	•	٠	•	٠	•	•	•	٠	•	٠	٠	٠	•	•	•	•	•	•	•	•	•	•	٠	•	٠	٠	•	
			•	•	•	•	•	•								•	•							•	•	•		•	•			•		•				
			٠	٠	٠	٠	٠																		٠				٠									
			٠	٠	٠	٠	٠													٠					٠				٠									
		•	٠	٠	٠	٠	٠		•	•	•		•						•				•		٠	•	•		٠		•							
•	٠		٠	•	٠	•	٠	•	•		•	•	•	•		•	•	•	•	•	•	•	•		•			•	•	٠		•	•	•	•	•		
	•		•	•	•	•	•	•		•	•					•				٠					•	•		•	•	•	•			•	٠			•
												٠		٠				٠		٠	٠	٠											٠		٠	٠		
										٠								٠								٠				٠	٠		٠			٠	٠	٠
			٠	٠	٠	٠	٠	٠								٠		٠		٠					٠			٠	٠				٠	٠				
	•	•	٠	•							•																		•									
•	•	•	•																					•														
	•		•	•																				•														
			٠																																		•	