

The Great Height Debate

The five people on your board of directors all have children of different ages. They want your theme park to be fun for the whole family, so you need a ride that **EVERYONE** can ride on. Begin by converting all of the children's heights to inches. Then, solve the problems to fill in the charts with the minimum heights of each ride in **FEET** and **INCHES**. Finally, write which children can ride each ride in the column on the right.



JACKSON

5' 7"



HILLARY

4' 4"



JENNY

5' 2"



LEON

3' 2"



KENT

4' 5"



TERESA

3' 11"

MINIMUM HEIGHT REQUIREMENTS

RIDE	PROBLEM	MINIMUM HEIGHT	WHO CAN RIDE
FERRIS WHEEL	Must be one yard tall to ride		
ROLLER COASTER #1	Must be one foot taller than the minimum height of the Ferris Wheel		
ROLLER COASTER #2	Six inches taller than the minimum height of Roller Coaster #1		
MERRY GO ROUND	Must be two feet tall to ride		
SWINGS	Any child three and a half feet or taller can ride		
BUMPER CARS	Must be at least four and a half feet tall		
SWINGING SHIP	Must be 48 inches or taller		
DROP TOWER	Any child greater than 52 inches may ride.		
WATER LOG RIDE	Must be at least two feet, 6 inches taller than the minimum requirement of the Merry Go Round.		
TRAIN	Any child greater than 24 inches may ride.		

The Longest Lines

It's never good to keep people waiting, but it happens at a theme park no matter how fast your rides might move! Fill in the tables below to give an estimate of how long lines will be and how long it will take people to get through the lines.

LENGTH OF LINE (YARDS)	NUMBER OF PEOPLE IN LINE	LENGTH OF LINE (FEET)	TIME IN LINE (MINUTES)	TIME IN LINE (SECONDS)
1	5		2	
5			10	
10			20	
15			30	
20	100		40	
25			50	
30	150		60	

Imagine a customer only has an hour to ride rides. The current lengths of each line are listed below. Use the information to write the current wait time.

RIDE	CURRENT LENGTH	WAIT TIME
Ferris Wheel	75 people	
Roller Coaster #1	25 yards	
Roller Coaster #2	25 people	
Merry Go Round	75 feet	
Swings	5 people	
Bumper Cars	60 feet	
Swinging Ship	50 people	
Drop Tower	45 feet	
Water Log Ride	150 people	
Train	25 yards	

Write THREE combinations of rides they could ride in an hour.