SOLUTION — TRIP TO THE WATERSLIDES

• This is one possible solution. It is a reasonable solution but not the only one.

•I thought a good place to start would be to figure out how many adults must go on the trip. To do this I divided the number of students by the number of students required per adult.
173 ÷ 12 = 14.41…

•I know that I must take at least 15 adults. I had to round up as 14 would be lower than the 1 : 12 ratio required by the park. Since there are 6 teachers, I calculated that I needed 9 parents.
15 – 6 = 9 parents

•Next, I calculated how many people will be going altogether by adding the students and adults together.
173 + 15 = 188 in total.

•Then I calculated how many people would be on each bus by dividing the total people by 48 (the maximum number of people on a bus). I found that all the people would fit on 4 buses.
188 ÷ 48 = 3. 91…

•Next, I calculated about how many students I should place on each bus by dividing the total students by the number of buses.
173 ÷ 5 = 43.25

•I know that I should put about 43 students on each bus. There is one student leftover so I added that student to one of the buses. Then I put at least one teacher on each bus and divided the parents between the buses. I had to make sure that none of the buses had more than 48 people in total.

•Below is a **possible** arrangement.

	Students	Teachers	Parents
Bus #1	43	2	2
Bus# 2	43	2	2
Bus #3	43	1	3
Bus #4	44	1	2
Total	173	6	9

•The last thing I did was to check that I had included everyone. I did this by adding all my totals.

173 + 6 + 9 = 188

•I included everyone. My arrangement works.