Practice Relay - Player 1
If \( x = 1 \), what is the value of \( x + 10 \)?

Practice Relay - Player 2
Replace \( N \) below with the number you receive.
Sebastian made 5 bracelets on Tuesday, 4 bracelets on Thursday, and \( N \) bracelets on Saturday. How many bracelets did he make in total?

You can start working on this question while you’re waiting for Player 1’s answer.

Practice Relay - Player 3
Replace \( N \) below with the number you receive.
Kati has the following collection of umbrellas.

If the plain umbrellas cost $10 and the spotted umbrellas cost \( N \) dollars, what is the total cost of the umbrellas in dollars?

You can start working on this question while you’re waiting for Player 2’s answer.

Practice Relay - Player 4
Replace \( N \) below with the number you receive.
Kiran is thinking about his age. He determines that six years from today, he will be 11 years old. How old will Kiran be \( N \) years from today?

You can start working on this question while you’re waiting for Player 3’s answer.
Relay A - Player 1

The students in Narayan’s class were each asked how many siblings they have. The results are shown in the bar graph. How many students have at least one sibling?

![Bar Graph]

Relay A - Player 2

Replace $N$ below with the number you receive.
Safiya started a run at 1:40 p.m. and finished at 2:30 p.m. She ran with her friend for the first $N$ minutes, then ran alone for the remaining time. How many minutes did she spend running alone?

💡 You can start working on this question while you’re waiting for Player 1’s answer.

Relay A - Player 3

Replace $N$ below with the number you receive.
The scale shown is balanced.

![Balance Scale]

Each square has a mass of $N$ g, and each triangle has a mass of $\frac{N}{2}$ g. What is the mass, in grams, of the circle?

💡 You can start working on this question while you’re waiting for Player 2’s answer.

Relay A - Player 4

Replace $N$ below with the number you receive.
The diagram shows a white rectangle inside a shaded rectangle. The white rectangle is 10 m by 30 m and the shaded rectangle is 20 m by $N$ m. What is the area of the shaded region, in m$^2$?

💡 You can start working on this question while you’re waiting for Player 3’s answer.
Relay B - Player 1

There are fewer than 20 students in Mr. Patel’s class. He can arrange the students in 4 equal-sized
groups. He can also arrange the students in 6 equal-sized groups. How many students are in Mr.
Patel’s class?

Relay B - Player 2

Replace $N$ below with the number you receive.
How many of the following numbers are divisible by 3?

99, 64, 57, 26, 30, $N$

You can start working on this question while you’re waiting for Player 1’s answer.

Relay B - Player 3

Replace $N$ below with the number you receive.
What is the sum (as a fraction) of the three smallest fractions in the following list?

\[
\frac{2}{5}, \frac{3}{4}, \frac{1}{2}, \frac{1}{5}, \frac{1}{N}
\]

You can start working on this question while you’re waiting for Player 2’s answer.

Relay B - Player 4

Replace $N$ below with the number you receive.
The number 7 is inputted into a number machine. The machine then does the following steps:

1. Multiply input number by itself.
2. If the result is even then add 6, otherwise add 5.
3. Divide the result by 2.
5. Multiply the result by $N$.
6. Output the result.

What is the output?

You can start working on this question while you’re waiting for Player 3’s answer.
Relay C - Player 1
When fifteen is written in numeric form, it is 15.
When the following number is written in numeric form, what is the sum of its digits?

two million five hundred sixty-four thousand fourteen

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Relay C - Player 2
Replace \( N \) below with the number you receive.
Noemi has \( N \) marbles. Of these, 5 are blue, and the rest are either red or yellow. If Noemi takes a marble at random without looking, the probability that it is yellow is 50%. How many of the marbles are red?

💡 You can start working on this question while you’re waiting for Player 1’s answer.

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Relay C - Player 3
Replace \( N \) below with the number you receive.
The 1\(^{\text{st}}\) term in a sequence is 4, and the 2\(^{\text{nd}}\) term is 3. Each term after that is equal to the sum of the two previous terms in the sequence.
For example, the 3\(^{\text{rd}}\) term is equal to the sum of the 1\(^{\text{st}}\) and 2\(^{\text{nd}}\) terms, which is \( 4 + 3 = 7 \).
What is the \( N^{\text{th}} \) term in the sequence?

💡 You can start working on this question while you’re waiting for Player 2’s answer.

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Relay C - Player 4
Replace \( N \) below with the number you receive.
A food truck has the following menu.

<table>
<thead>
<tr>
<th>Item</th>
<th>Price (incl tax)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamburger</td>
<td>$1.75</td>
</tr>
<tr>
<td>Hot dog</td>
<td>$1.25</td>
</tr>
<tr>
<td>Box of Fries</td>
<td>$1.50</td>
</tr>
<tr>
<td>Drink</td>
<td>$0.75</td>
</tr>
</tbody>
</table>

Iacob buys 2 hamburgers, 3 hot dogs, 2 boxes of fries, and 2 drinks for his family. If he had \( N \) in cash before buying the food, how much does he have left afterwards (in $)?

💡 You can start working on this question while you’re waiting for Player 3’s answer.
# 2024 Team Up Challenge

## Relay Answer Sheet

<table>
<thead>
<tr>
<th>Team:</th>
<th>Practice Relay</th>
<th>Relay A</th>
<th>Relay B</th>
<th>Relay C</th>
</tr>
</thead>
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<td>Player 4</td>
</tr>
<tr>
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