# Practice Relay - Player 1

What is the value of 1 + 2 + 3 + 4 + 5?

### Practice Relay - Player 2

Replace N below with the number you receive.

A bowl contains apples, oranges, pears, and bananas. The table shows how many of each type of fruit are in the bowl.

Type of Fruit	Quantity
apples	3
oranges	6
pears	N
bananas	4

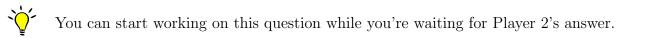
How many of the fruits in the bowl are *not* apples?

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. How many of the following numbers are divisible by 5?

15, 92, 40, N, 105, 140, 19



### Practice Relay - Player 4

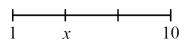
Replace N below with the number you receive.

An elevator started on floor N. It went up 2 floors, then down 1 floor, then down 3 more floors. What floor did it end up on?



## Relay A - Player 1

A number line starts at 1, ends at 10, and is divided into three equal parts as shown.



What is the value of x?

### Relay A - Player 2

Replace N below with the number you receive.

Josh has invented a jellybean doubling machine. Whenever he presses a button, the number of jellybeans inside the machine doubles. If the machine starts with N jellybeans, how many jellybeans will be there after Josh presses the button 3 times?

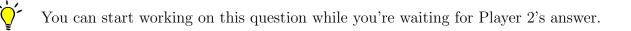
You can start working on this question while you're waiting for Player 1's answer.

#### Relay A - Player 3

Replace N below with the number you receive. The list of numbers 1, 39, 24, 16, N is repeated to form the following sequence.

1, 39, 24, 16, N, 1, 39, 24, 16, N, 1,...

What is the sum of the first 16 numbers in the sequence?



#### Relay A - Player 4

Replace N below with the number you receive.

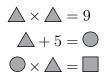
To complete an escape room Miloslav needs to enter a secret code, which is the sum of the following three values.

- The smallest positive integer greater than 99 that doesn't have any repeated digits.
- The largest two-digit positive integer that is divisible by 4.
- The value of  $3 \times N$ .

What is the secret code?

## Relay B - Player 1

The symbols  $\triangle$ ,  $\bigcirc$ , and  $\square$  each represent a positive integer. Consider the following three equations.

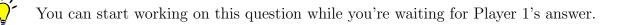


What is the value of  $\square$ ?

### Relay B - Player 2

Replace N below with the number you receive.

A small box of cookies has 8 cookies, a medium box has 10 cookies, and a large box has 12 cookies. Stefanie gave 2 small, 3 medium, and 3 large boxes of cookies to a group of N people. If each person took the same number of cookies, what is the maximum integer number of cookies that each person could have taken? Note that there may be leftover cookies in some boxes.



### Relay B - Player 3

Replace N below with the number you receive.

When plotted on a grid, three corners of a rectangle have coordinates (N, 5), (10, 5), and (10, 9). What is the area of the rectangle?



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.

There are N marbles in a bag, 3 of which are black. There are twice as many green marbles as black marbles. There are twice as many yellow marbles as green marbles. The remaining marbles are red. How many red marbles are there?



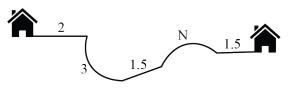
## Relay C - Player 1

Ahmed has a jar containing coins that are quarters (worth 25 cents), dimes (worth 10 cents), and nickels (worth 5 cents). If the total value of the coins in the jar is 65 cents, what is the fewest number of coins that could be in the jar?

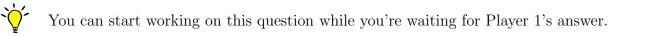
## Relay C - Player 2

Replace N below with the number you receive.

The map shows the route Vivek takes to bike to his friend Nabil's house. All distances shown are in kilometres.



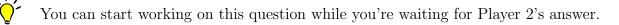
Vivek used this route to bike from his house to Nabil's house, and then from Nabil's house back home. How many kilometres did Vivek bike in total?



#### Relay C - Player 3

Replace N below with the number you receive.

Anar, Bette, and Cleo work as tree planters. Every day Anar plants 12 trees, Bette plants  $\frac{2}{3}$  as many trees as Anar, and Cleo plants 3 more trees than Bette. How many trees in total have they planted after N days?



### Relay C - Player 4

Replace N below with the number you receive. Alvina weighed six objects and recorded their masses as follows:

 $0.84~{\rm kg},~135~{\rm g},~1945~{\rm mg},~1765~{\rm g},~1.5~{\rm kg},~N~{\rm g}$ 

What is the mass, in grams, of the heaviest object?





# 2022 Team Up Challenge

# **Relay Answer Sheet**

Team: \_\_\_\_\_

Practice Relay					
	Player 1	Player 2	Player 3	Player 4	Teacher
1 <sup>st</sup> Attempt					
2 <sup>nd</sup> Attempt					

Relay A					
	Player 1	Player 2	Player 3	Player 4	Teacher
1 <sup>st</sup> Attempt					
2 <sup>nd</sup> Attempt					

Relay B					
	Player 1	Player 2	Player 3	Player 4	Teacher
1 <sup>st</sup> Attempt					
2 <sup>nd</sup> Attempt					

Relay C					
	Player 1	Player 2	Player 3	Player 4	Teacher
1 <sup>st</sup> Attempt					
2 <sup>nd</sup> Attempt					