

## Activity: Integer Race

Play in groups of 2 or 3.

Each group has a number line and one counter per person.

Your **aim** is to get to **-47** or **+47** first.

### How to play

- You start with a score of zero
- In each turn, you **roll** a die **twice** and get two numbers in order, e.g. say I roll 4 and then 6
- With those two numbers (in order), you use **two different operations** to change your **current score**, that is, add, subtract, multiply, divide. In my example, I could do:  $0 + 4 \times 6$ 
  - Also: **at least one** of your two numbers must be **negative**, i.e. put a negative sign before one of them  
e.g. if I choose 6 to be negative, then I could have  $0 + 4 \times -6$
  - You can insert **brackets wherever** you want
- After checking your calculation with your partner, place your counter at your new score.
- Now it's your partner's turn and they do the same thing

### Keeping Scores Straight

Each player: draw a table in your notebook to keep your numbers straight while doing the operations

1. You should start with a current score in the first column, for each row
2. Write your rolled numbers down in the third and fifth columns
3. Choose your negative number and choose your operations
4. Calculate the result and write the result in the first column of the next row

## Example Game

At the end of a game, one player's table of operations might look like this:

Current Score	Operation 1	1st roll	Operation 2	2nd Roll
0	-	1	+	-1
[-2	-	1]	×	-6
18	+	6	-	-1
[25	-	1]	×	4
96	÷	[-1	-	1]
-48	-	-3	+	-2
-47	I win!			