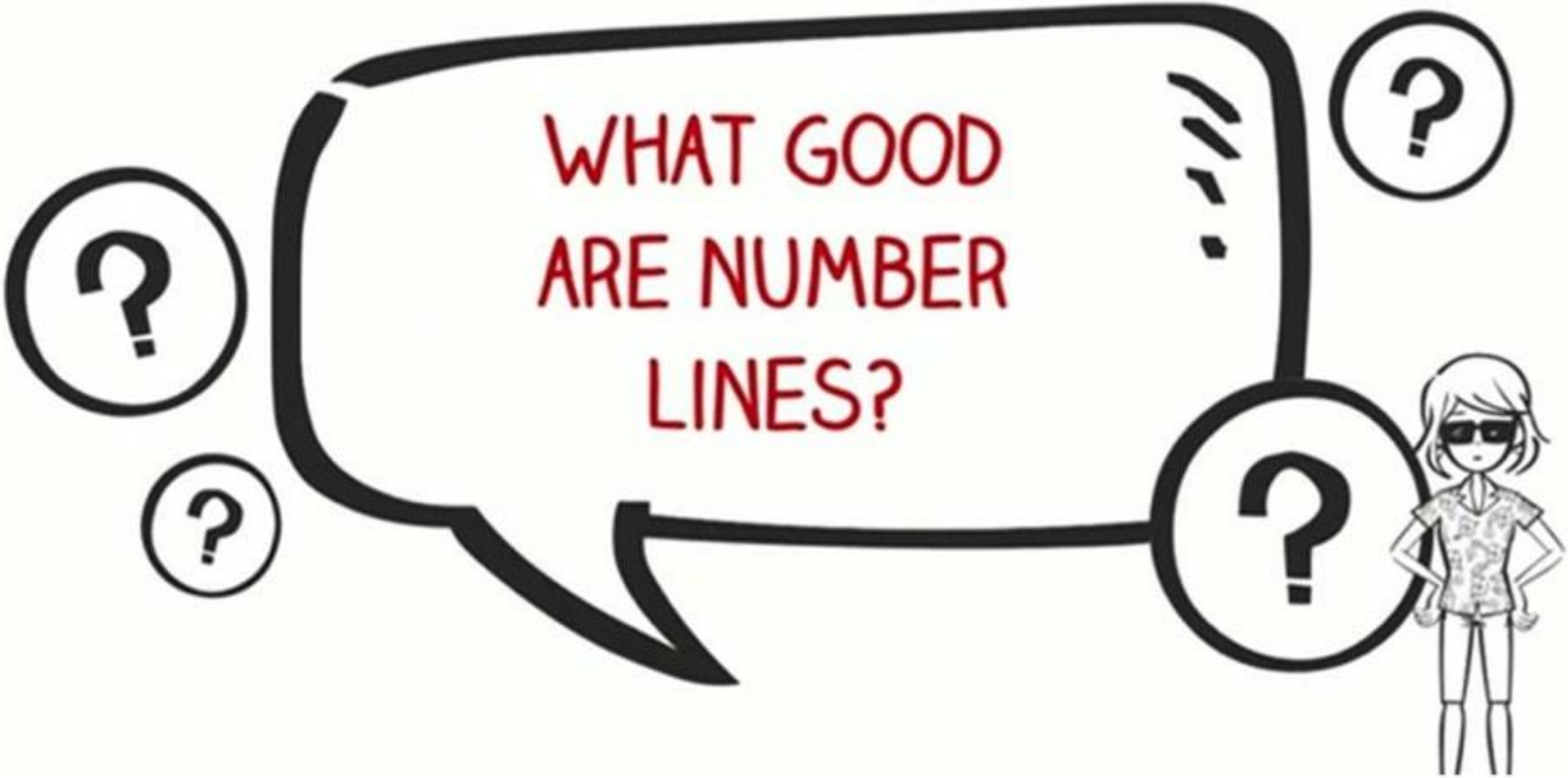
NUMBER LINES, FRACTIONS AND KNOWING HOW FAR

DID YOU EVER WONDER

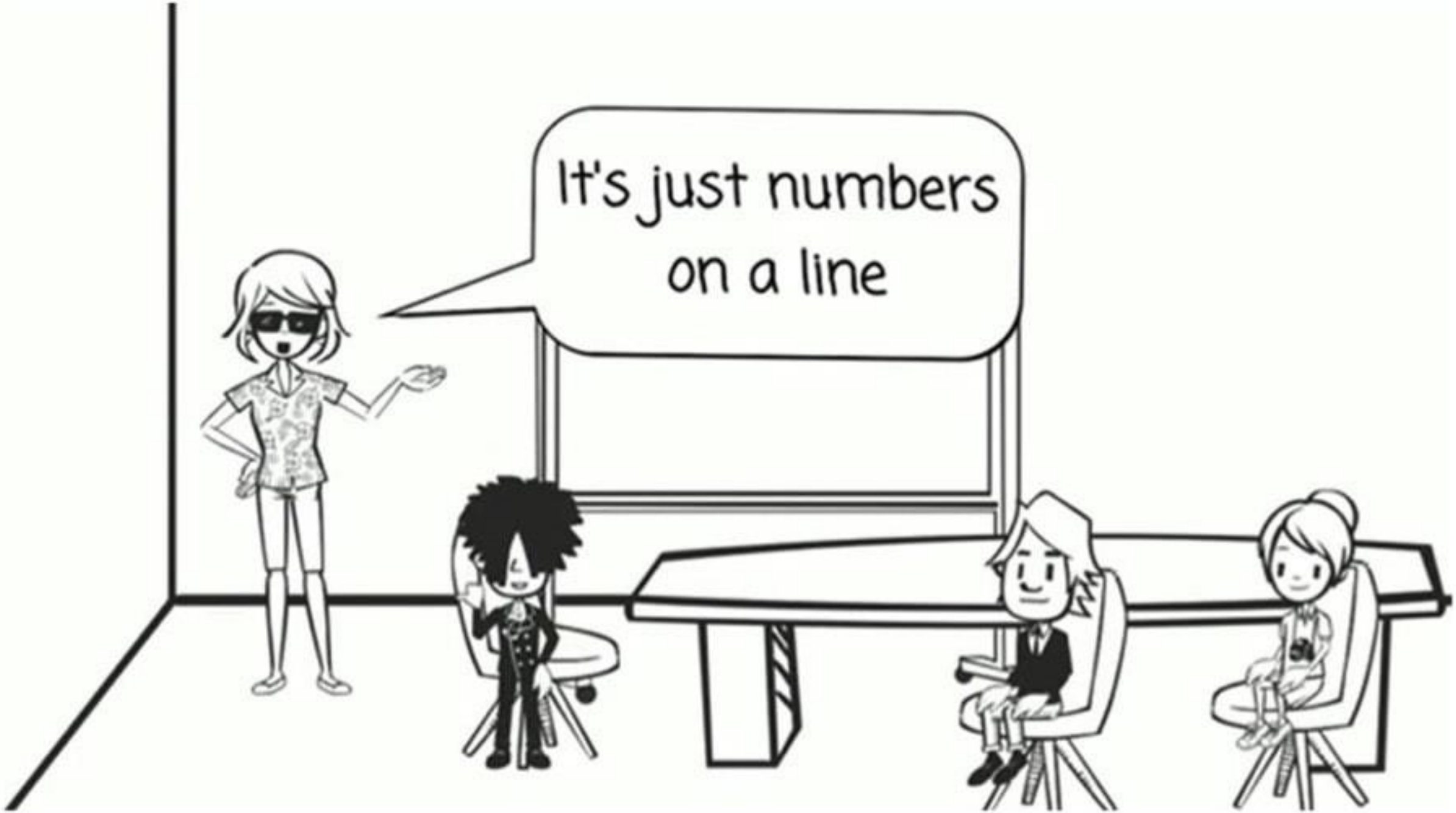
WHAT GOOD ARE FRACTIONS?

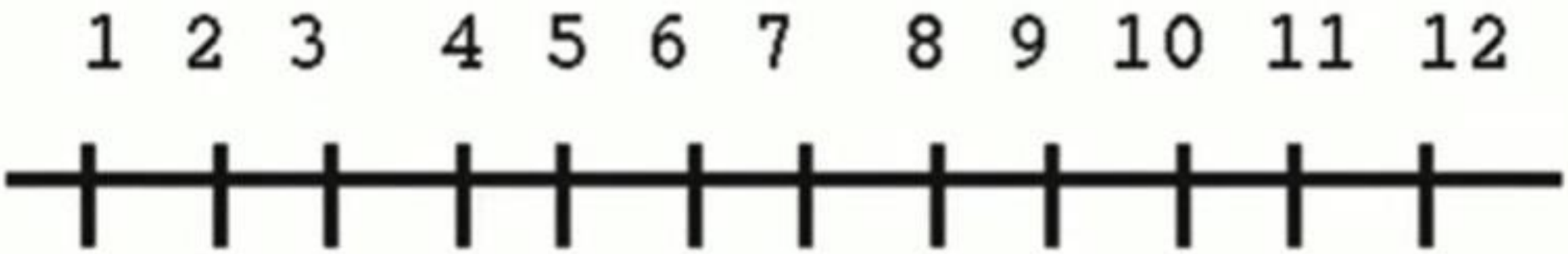

WHAT GOOD ARE NUMBER LINES?


LET'S GO BACK IN TIME


NOT THAT FAR BACK

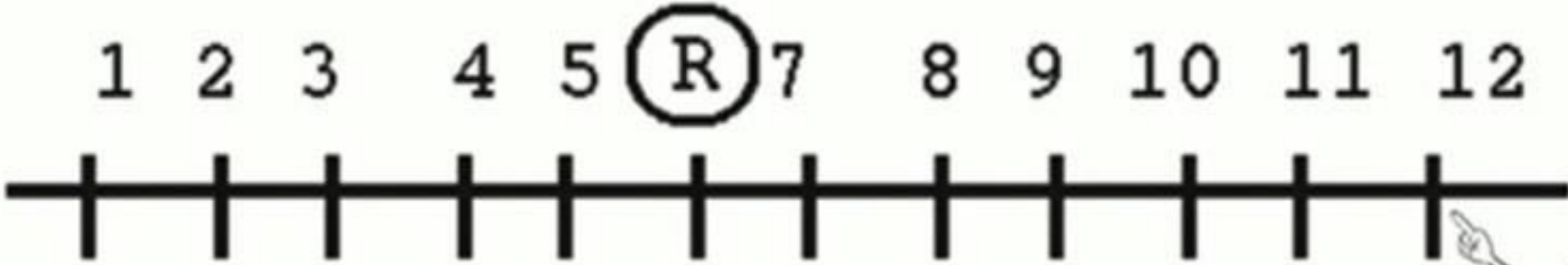

WHAT'S A NUMBER LINE?


It's just numbers on a line



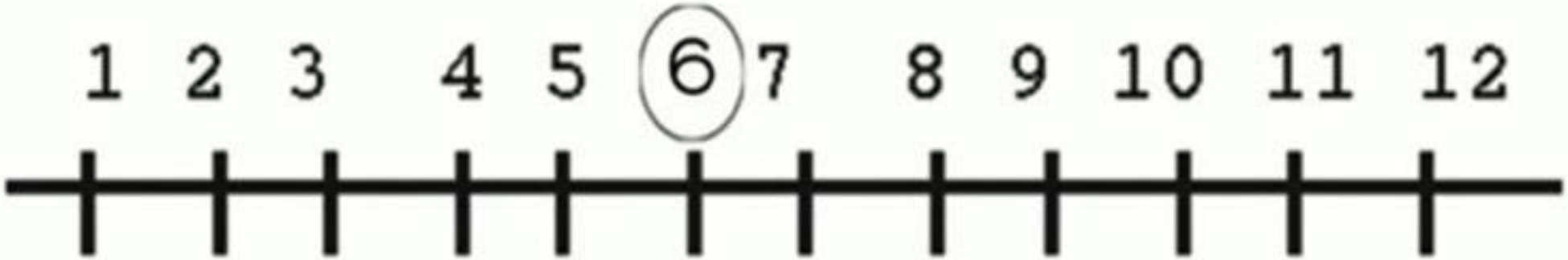
Just numbers on a line

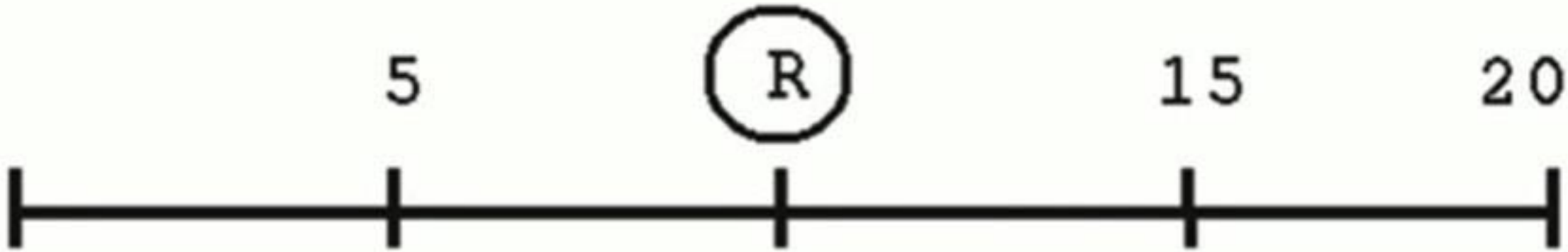

LET'S
WARM UP



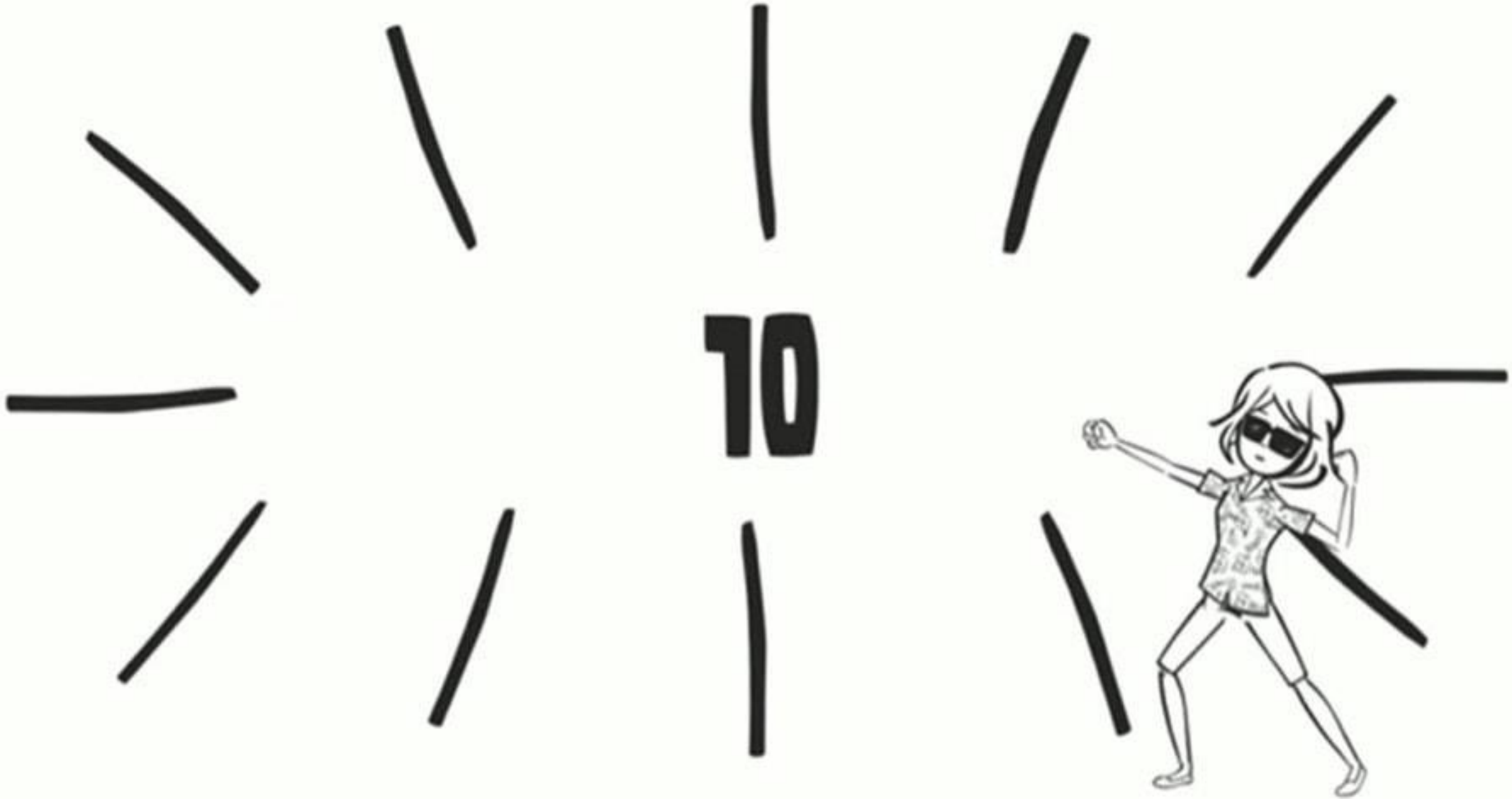
Which number is at point R ?

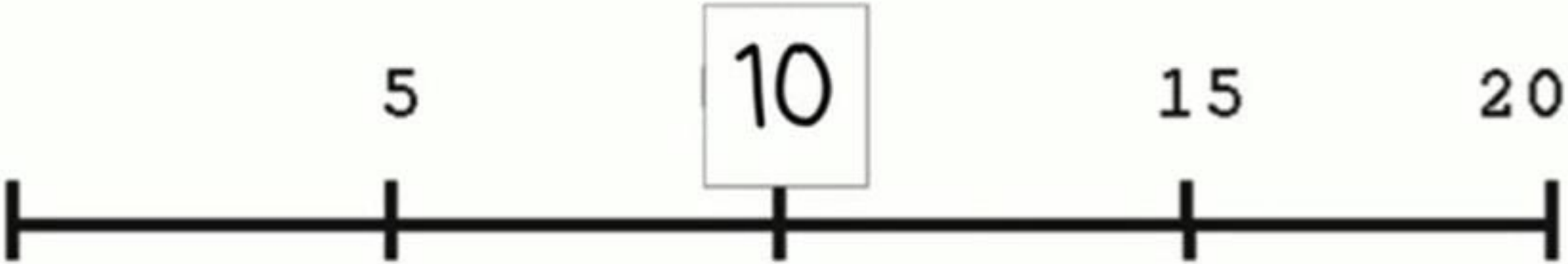

Did you say 6?


1 2 3 4 5 6 7 8 9 10 11 12

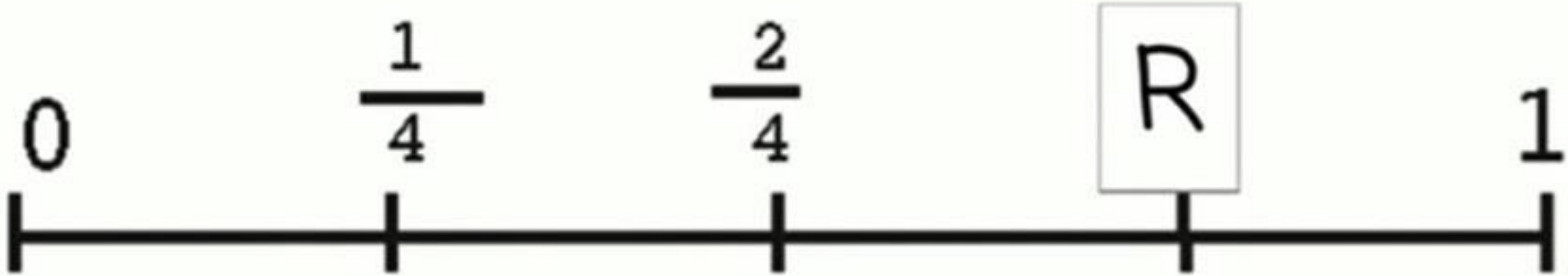


Which number is at point R now ?


10

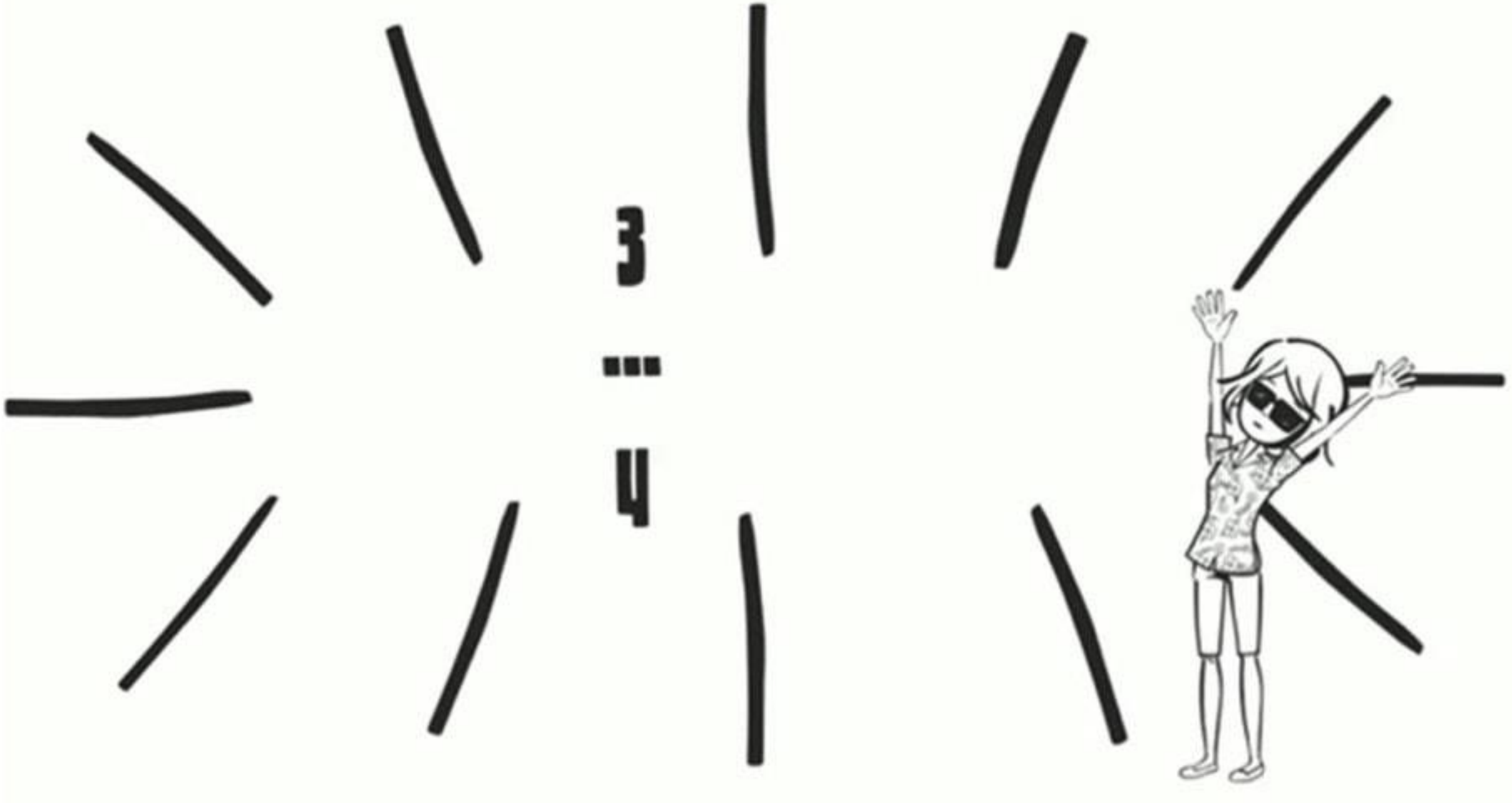


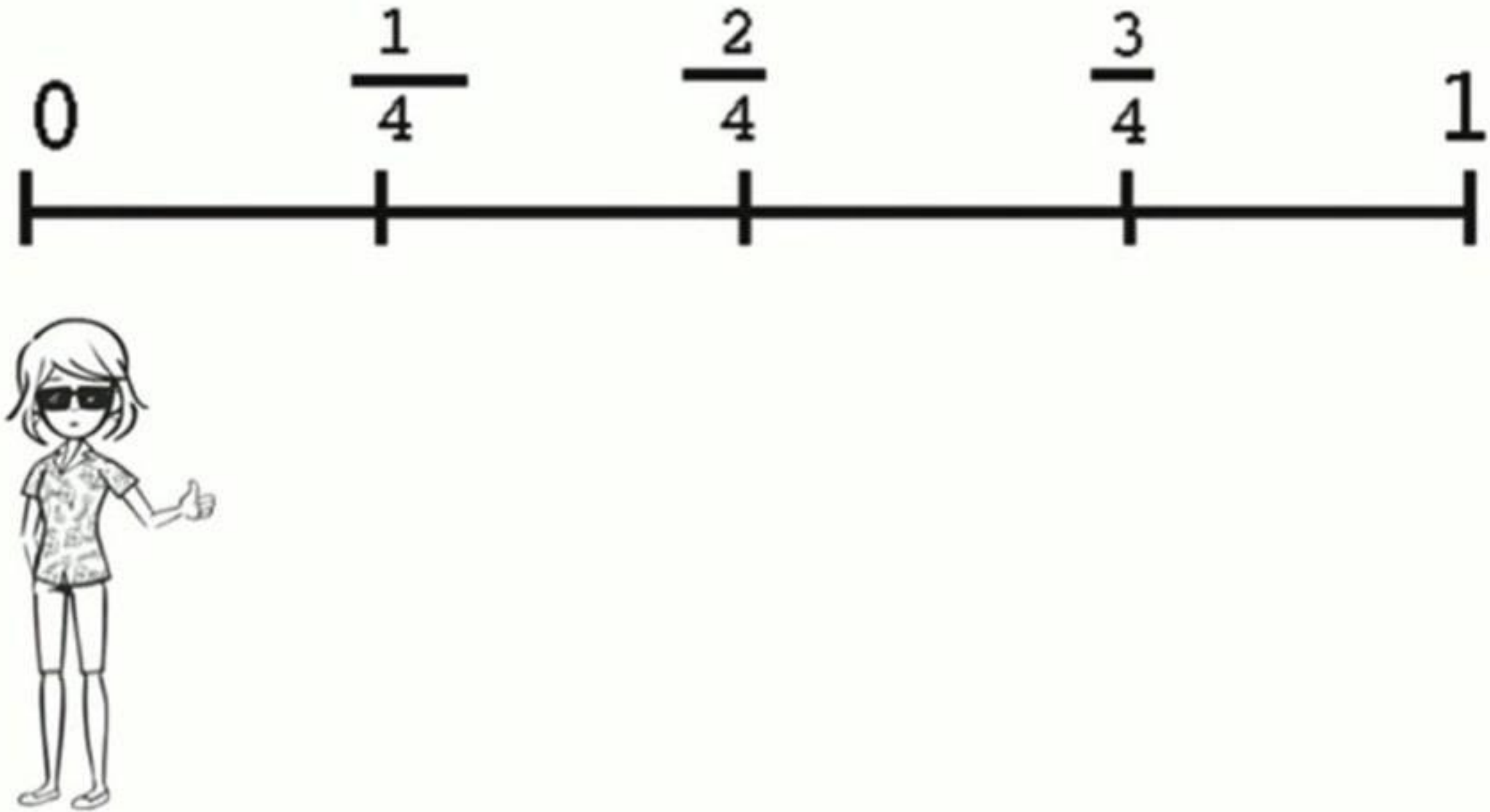
There it is! 10!
On the number line.

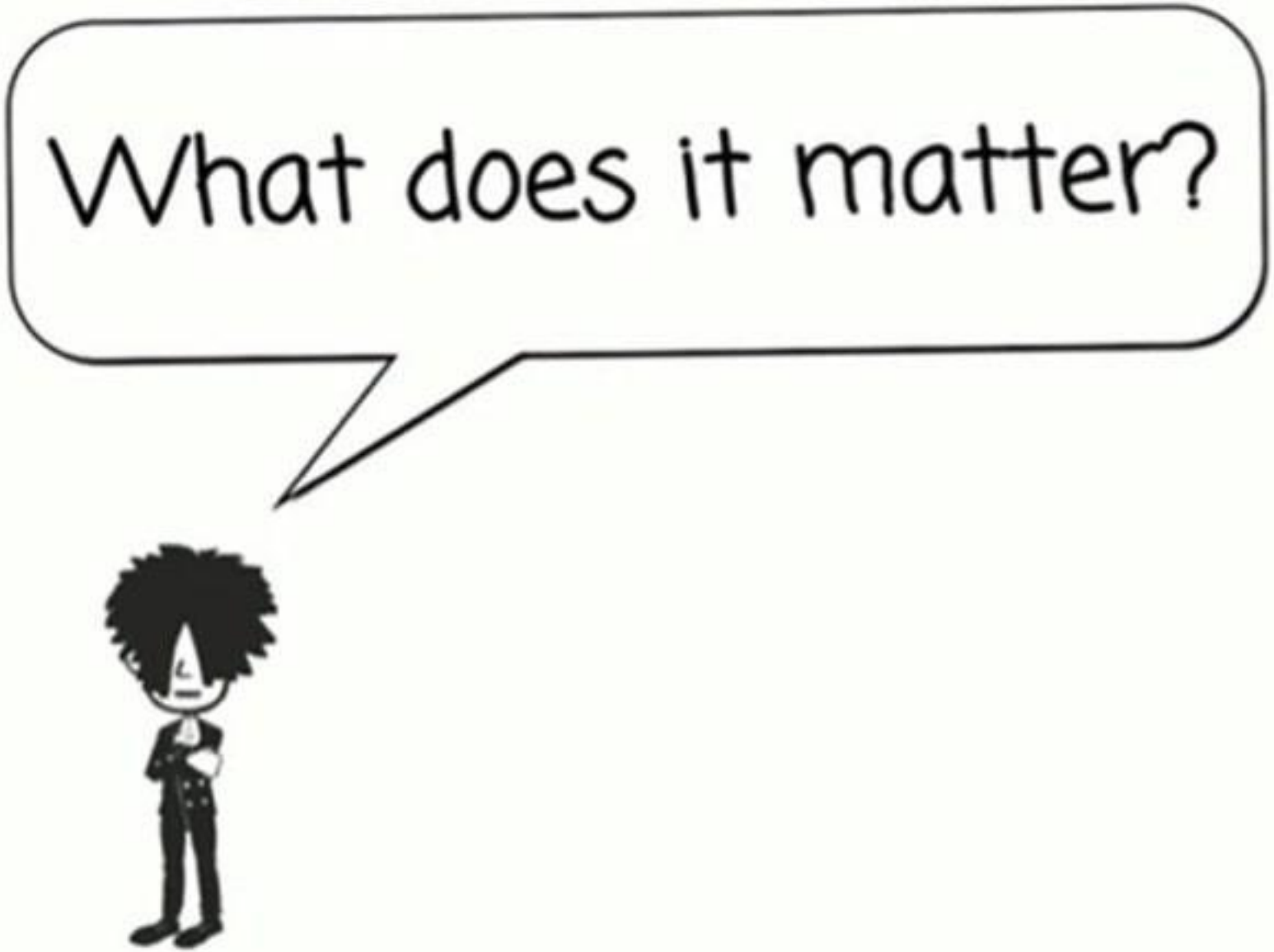


How about now?

What number is point R?


3
...
4


0
1/4
2/4
3/4
1


What does it matter?


Well, have you ever wondered ...

HOW LONG

UNTIL WE GET
SOMEWHERE?

IS IT

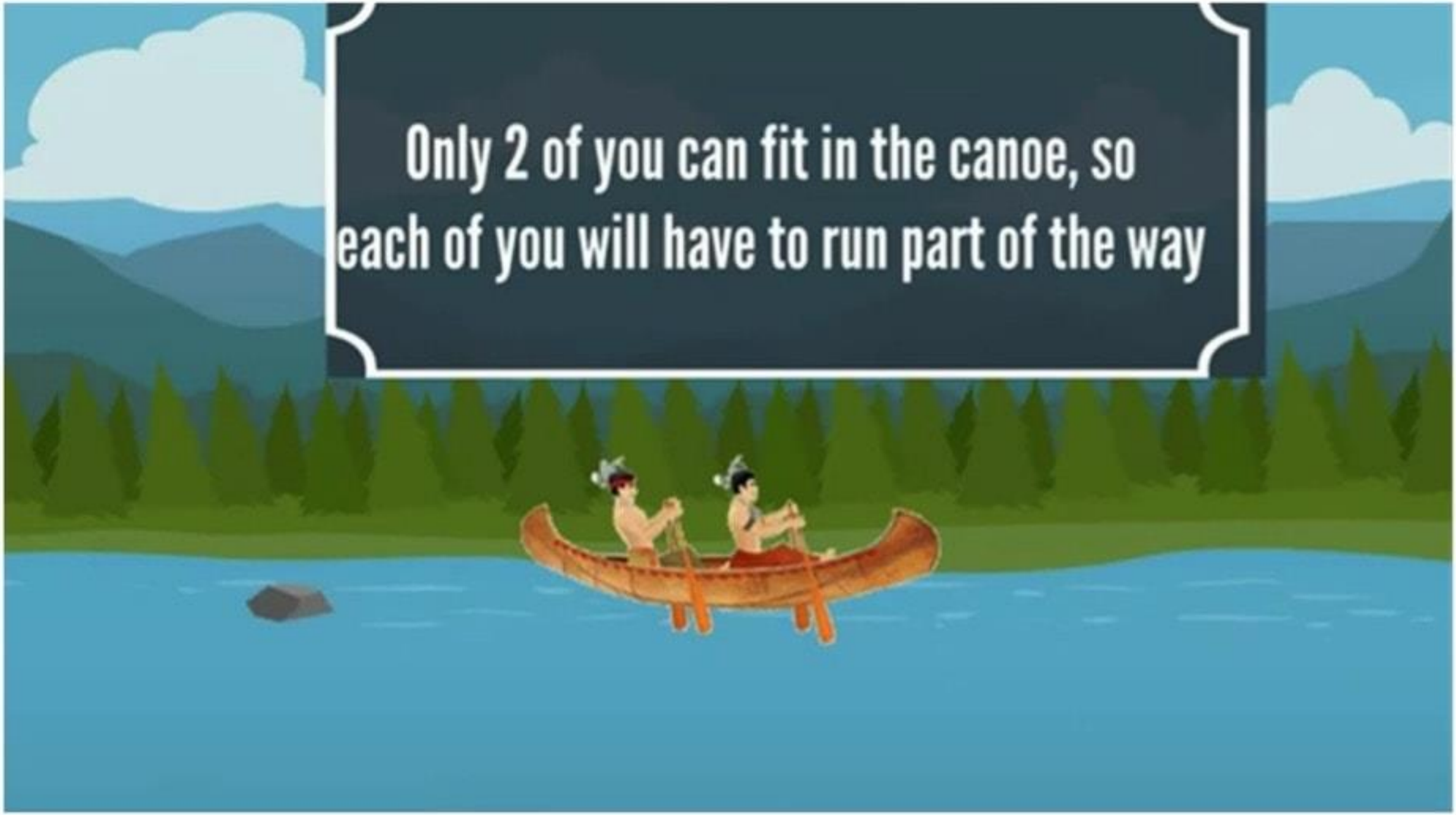
MY
TURN ?

IS IT

FAIR ?

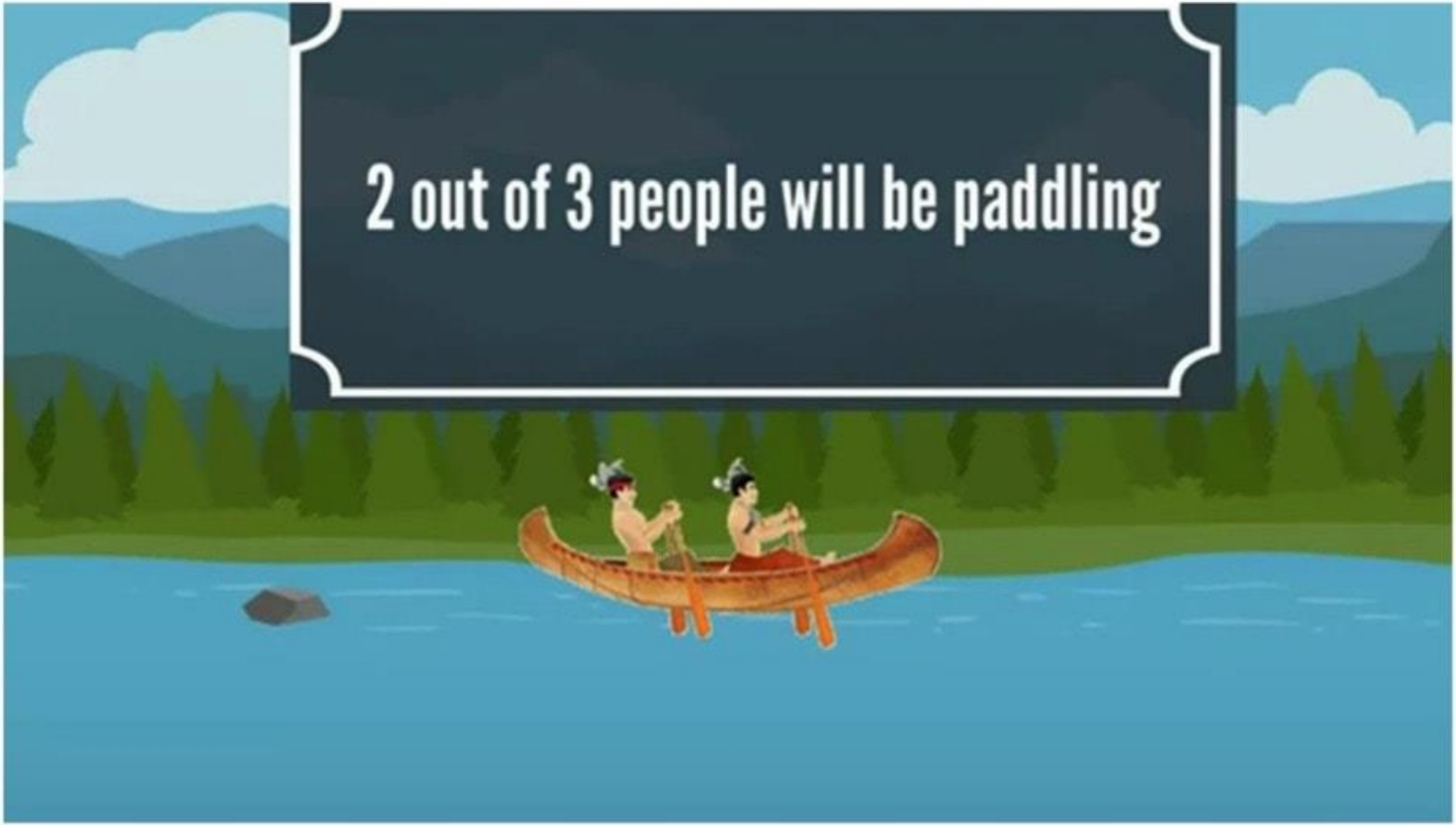
Let's do an example

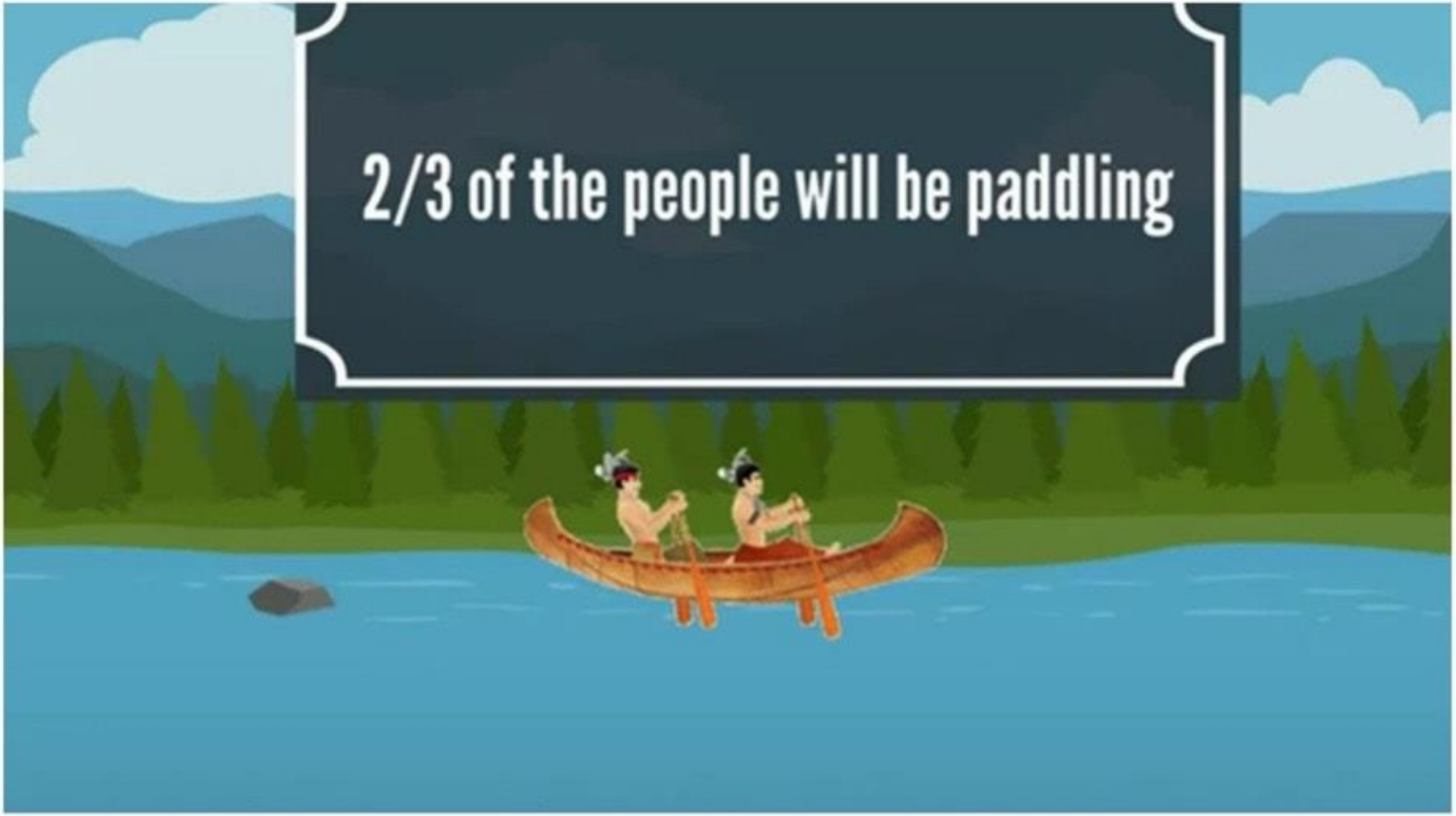

3 of you are traveling
9 miles to meet your cousins

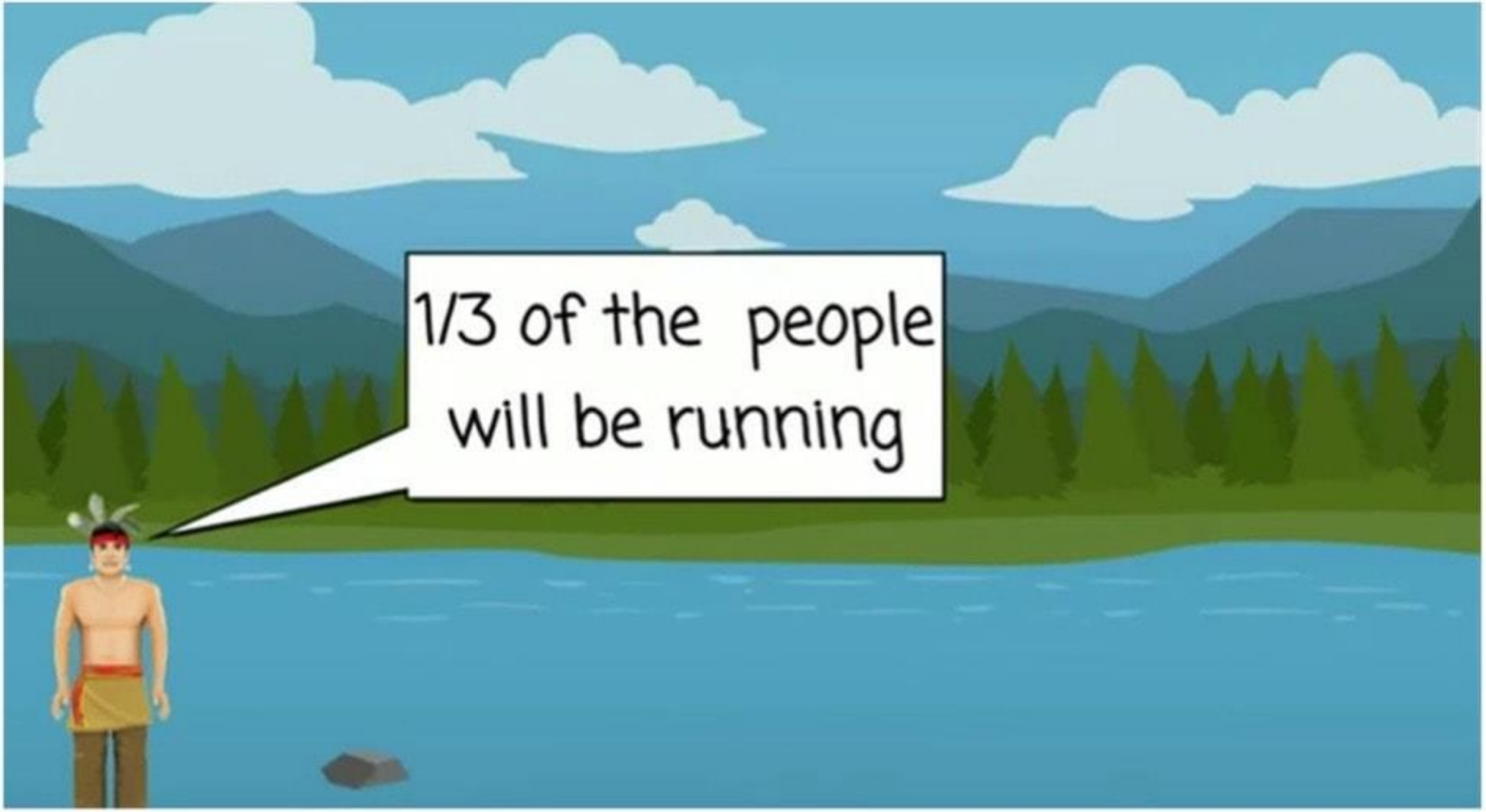

Only 2 of you can fit in the canoe, so
each of you will have to run part of the way


When is it your turn to get out and run?


THIS is a fraction question.


2 out of 3 people will be paddling


2/3 of the people will be paddling

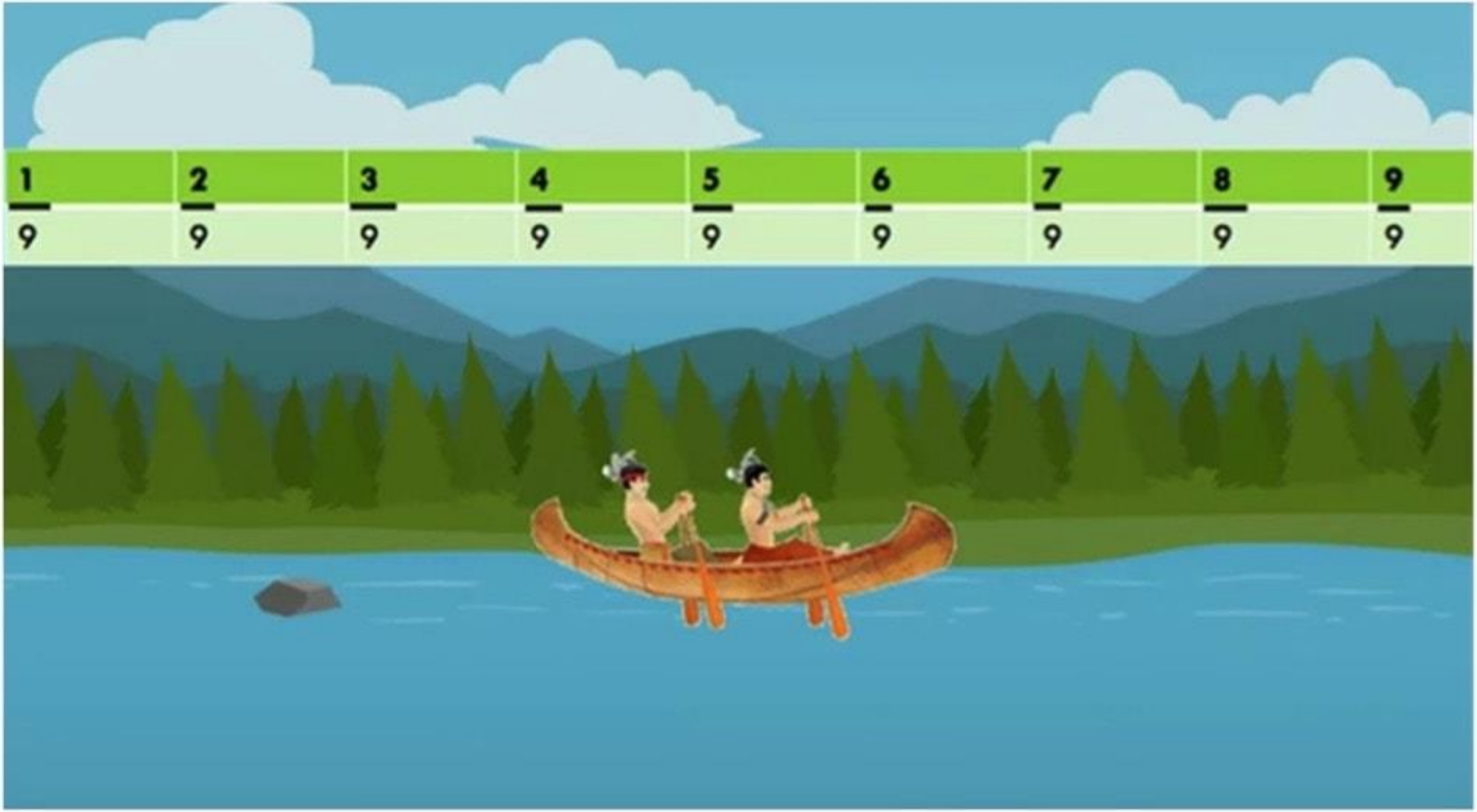

1/3 of the people will be running

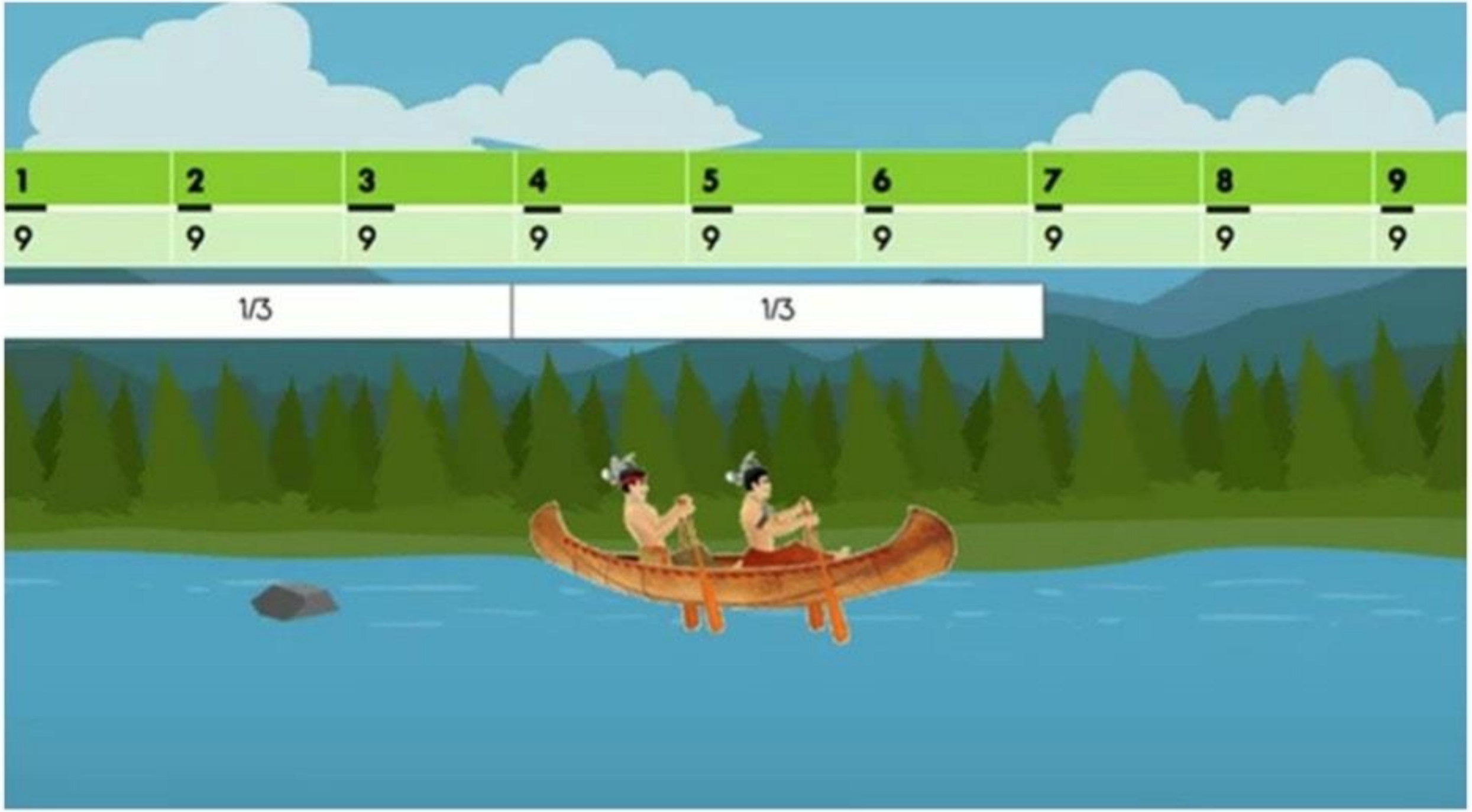

You will run 1/3 of the time.

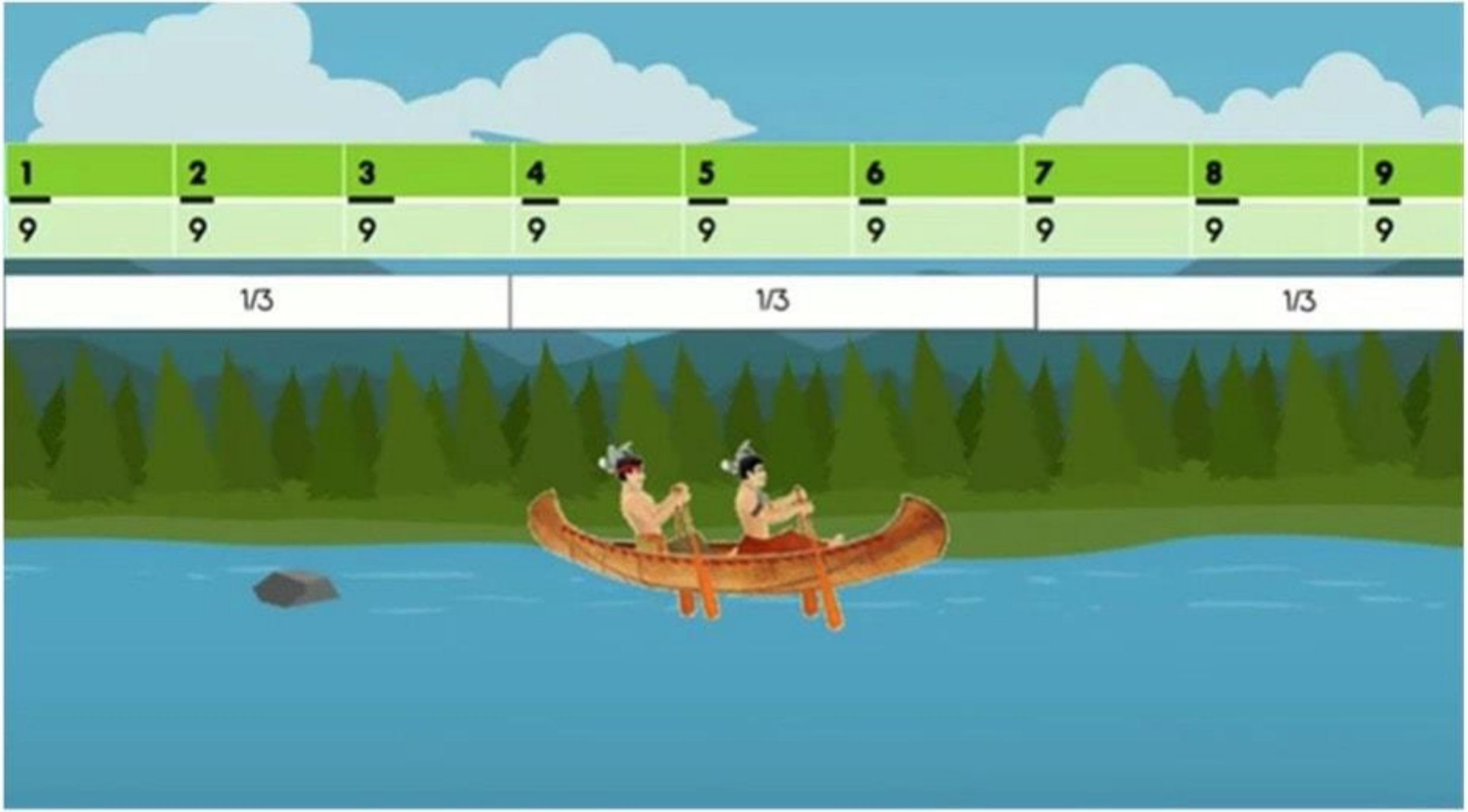

When is it your turn to run?

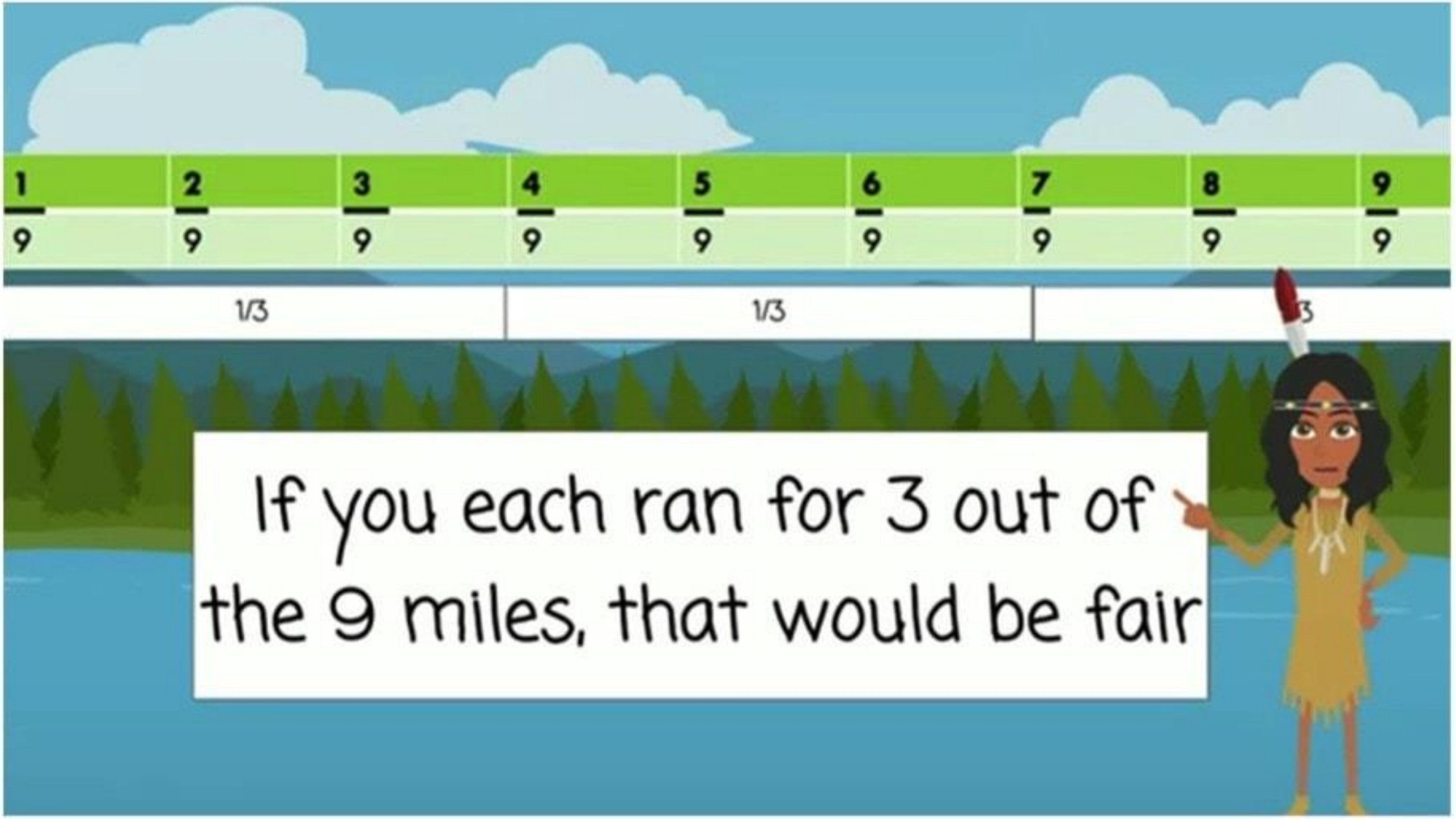
$\frac{1}{9}$	$\frac{2}{9}$	$\frac{3}{9}$	$\frac{4}{9}$	$\frac{5}{9}$	$\frac{6}{9}$	$\frac{7}{9}$	$\frac{8}{9}$	$\frac{9}{9}$

Answer with a number line.

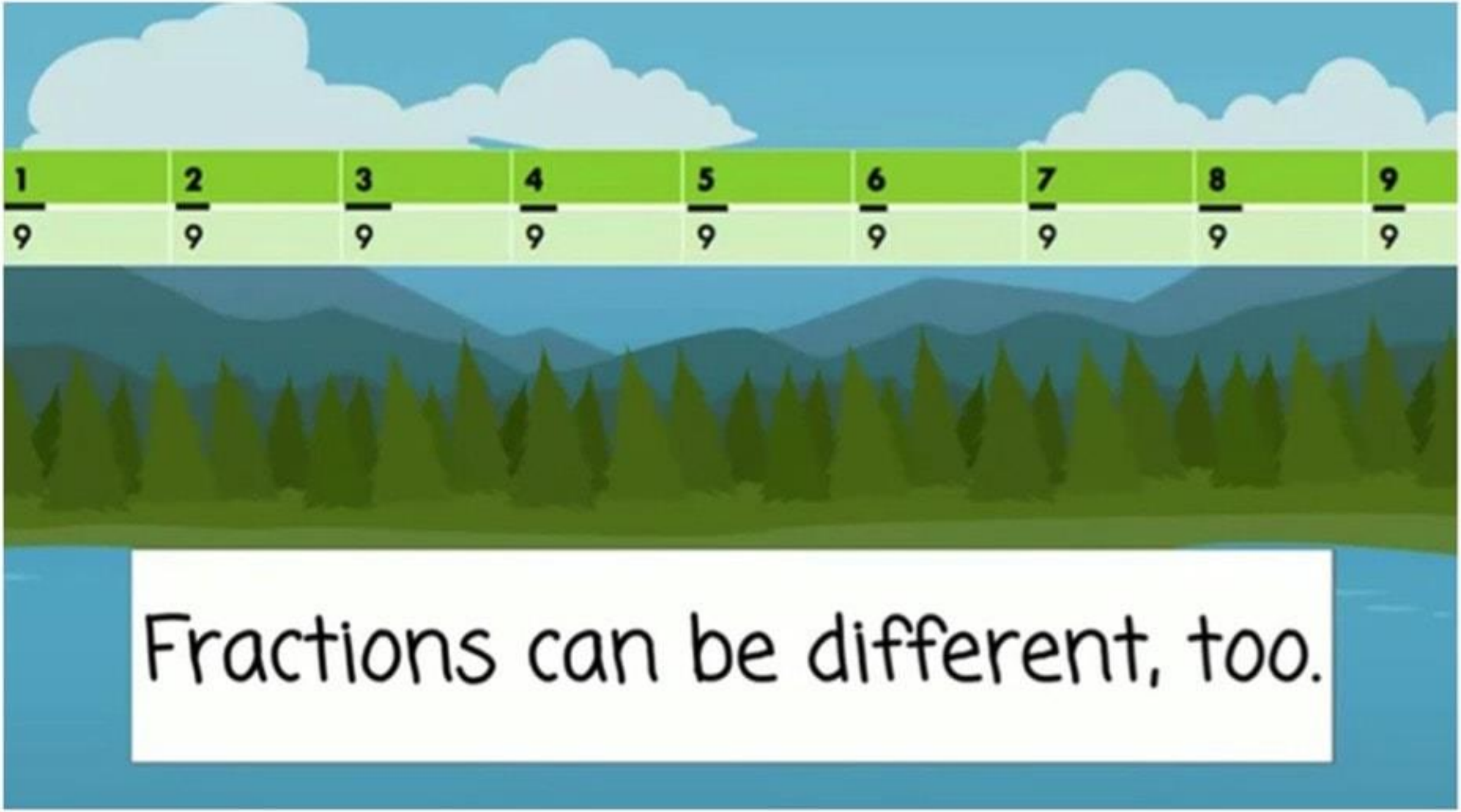

1/9
2/9
3/9
4/9
5/9
6/9
7/9
8/9
9/9

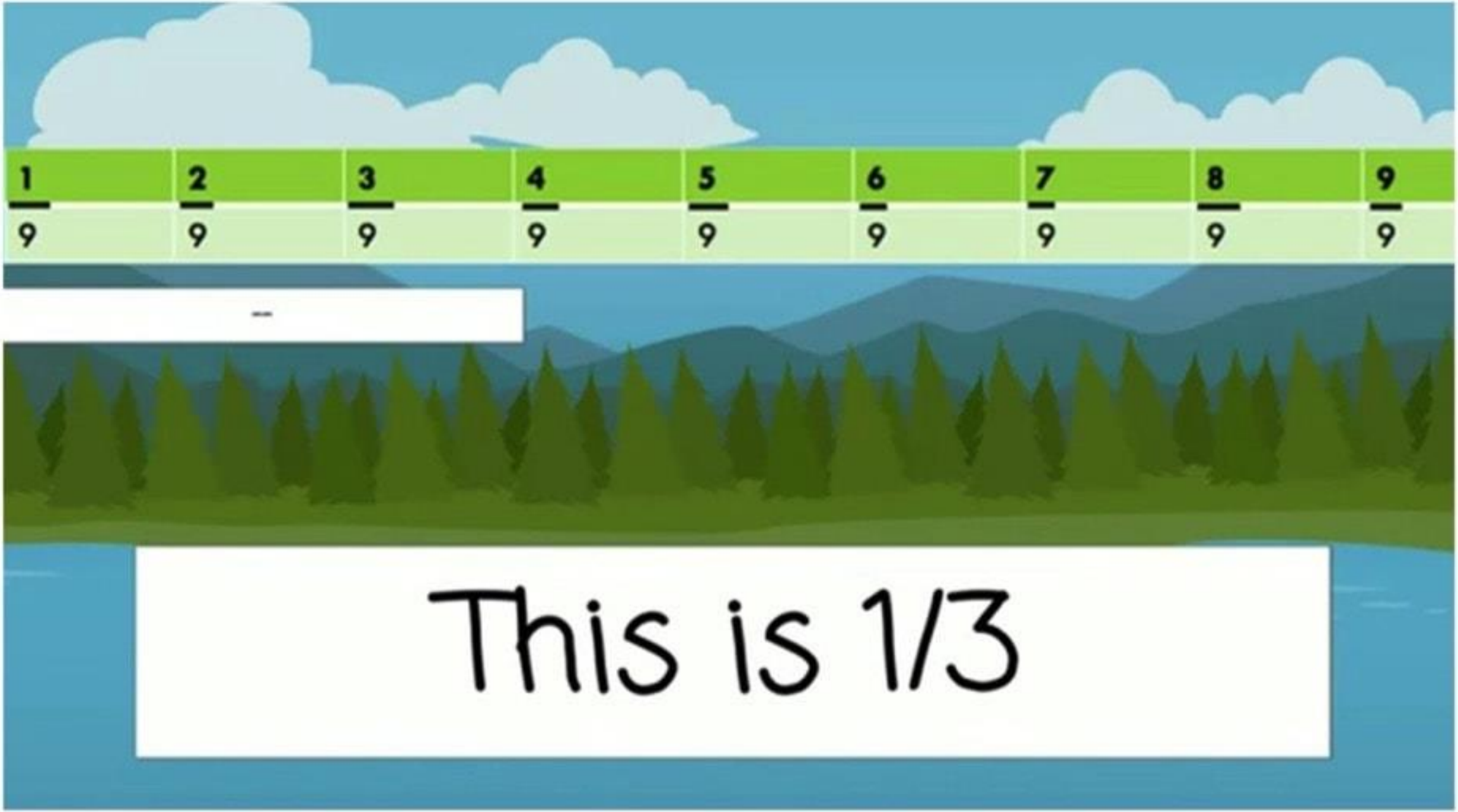

1/9
2/9
3/9
4/9
5/9
6/9
7/9
8/9
9/9
1/3
1/3

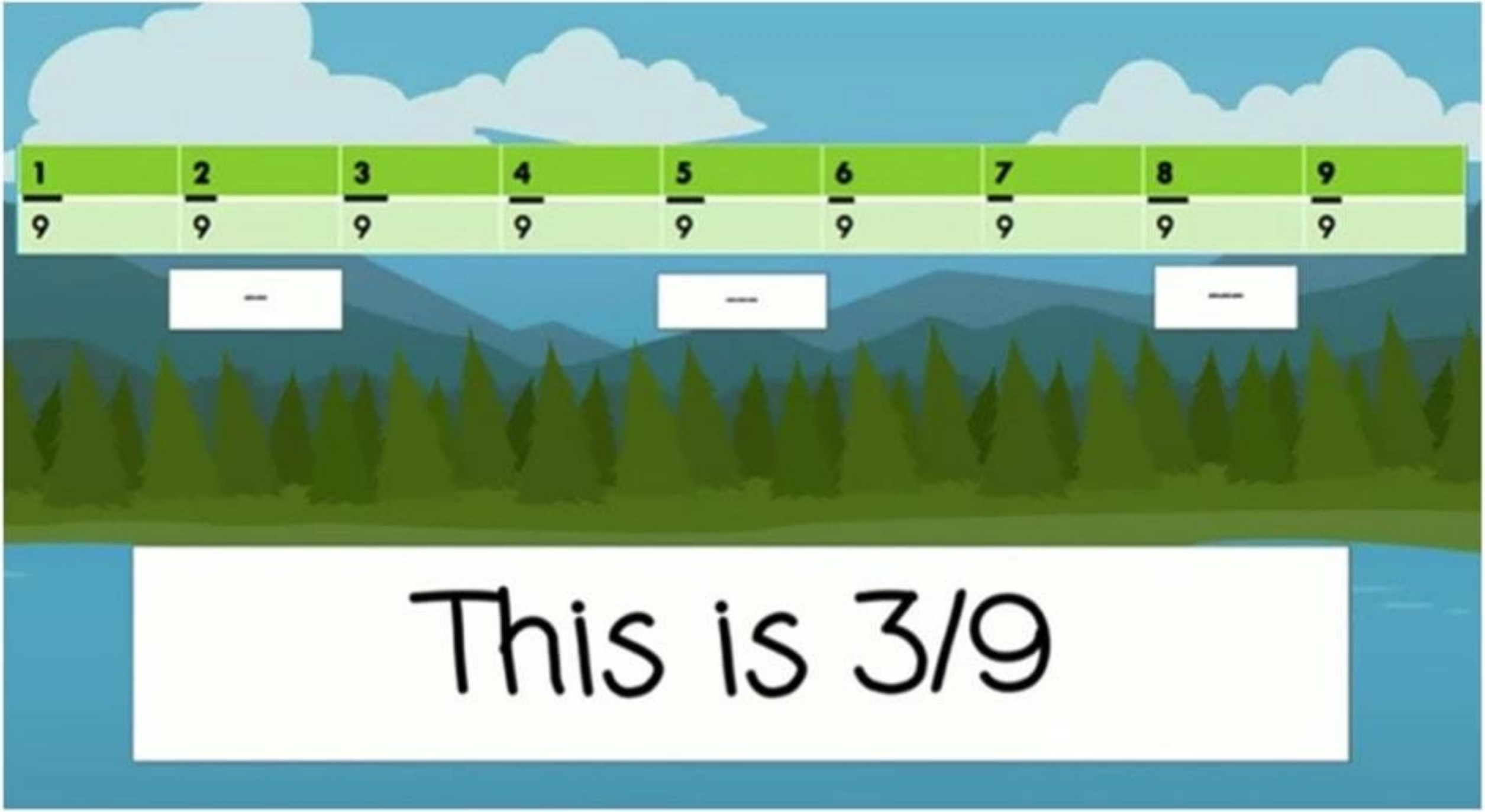

1/9
2/9
3/9
4/9
5/9
6/9
7/9
8/9
9/9
1/3
1/3
1/3


1/9
2/9
3/9
4/9
5/9
6/9
7/9
8/9
9/9
1/3
1/3
If you each ran for 3 out of the 9 miles, that would be fair

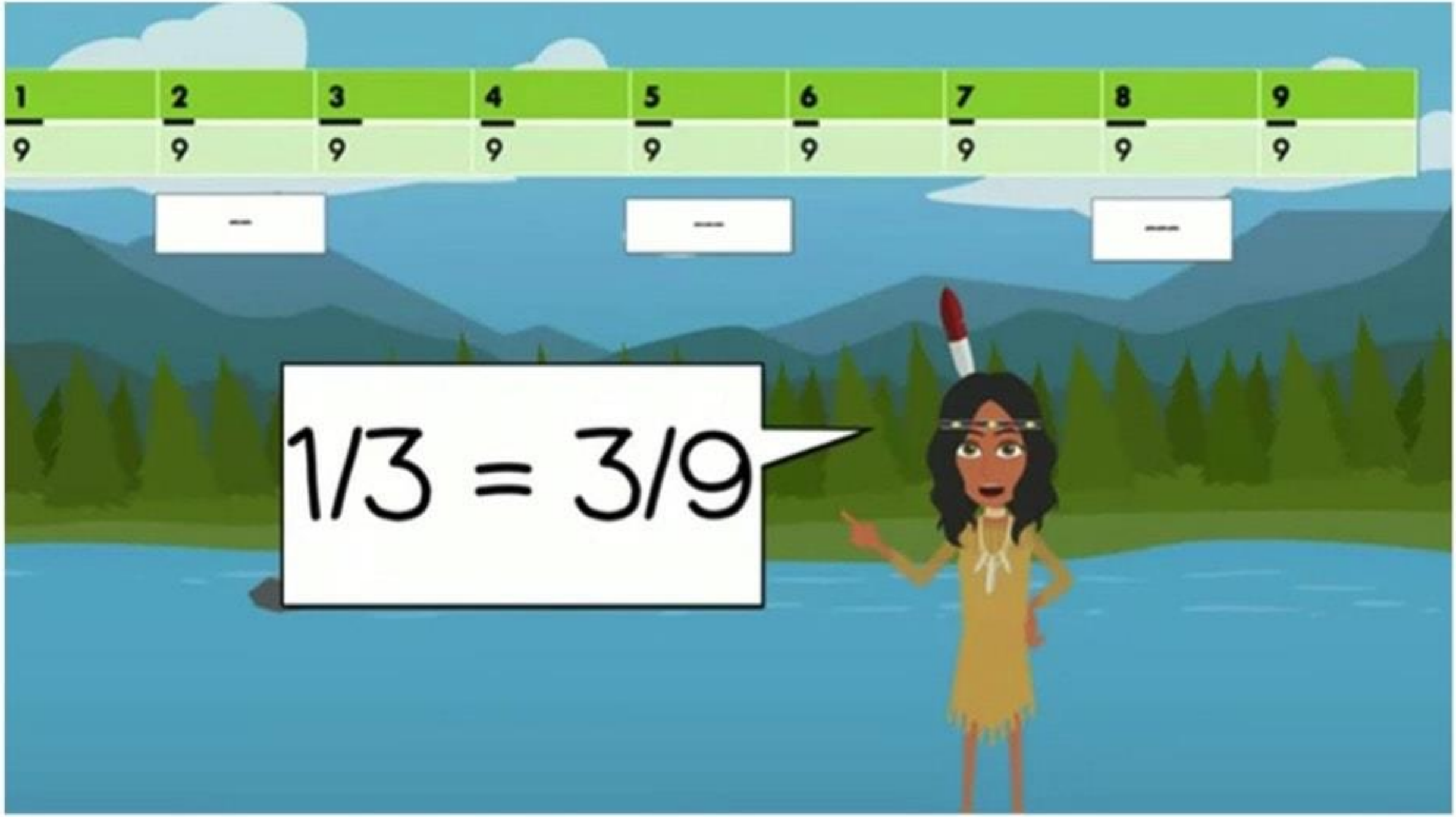

People are different.

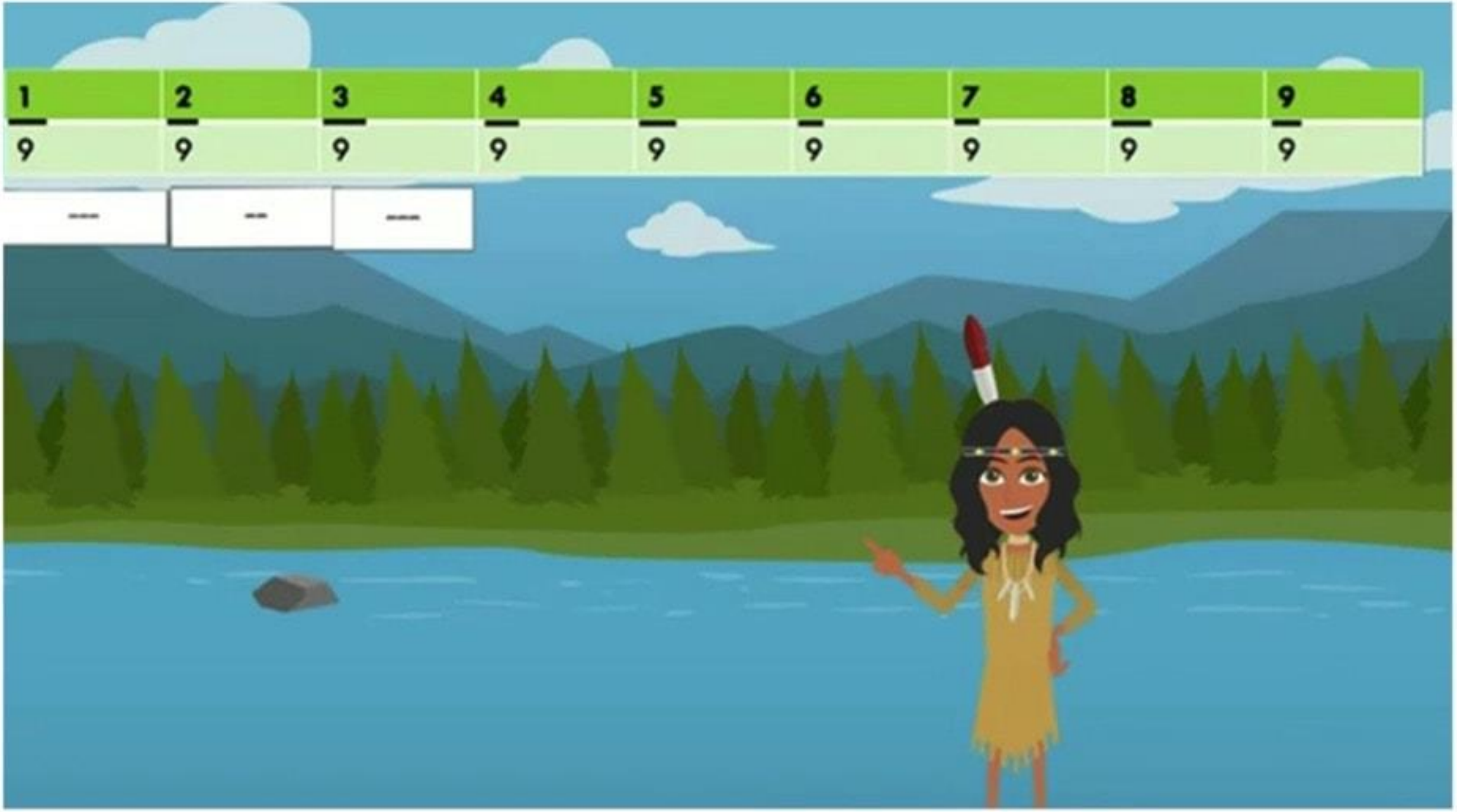

1/9
2/9
3/9
4/9
5/9
6/9
7/9
8/9
9/9
Fractions can be different, too.


1/9
2/9
3/9
4/9
5/9
6/9
7/9
8/9
9/9
This is 1/3


1/9
2/9
3/9
4/9
5/9
6/9
7/9
8/9
9/9
This is 3/9


Guess what?


1/9
2/9
3/9
4/9
5/9
6/9
7/9
8/9
9/9
1/3 = 3/9


1
9
2
9
3
9
4
9
5
9
6
9
7
9
8
9
9
9