

A **fraction** is a number.
 Fractions are also another way to write division.
 For example, we can write $1 \div 2$ as $\frac{1}{2}$.



The 1 is the **numerator**.
 It's the number being divided.

$$\frac{1}{2}$$

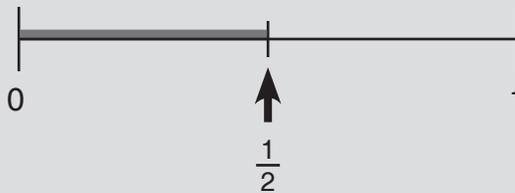
The 2 is the **denominator**.
 It's the number we are dividing by.

Since a fraction is a number, we can put it on the number line.

To locate $\frac{1}{2}$ on the number line, we divide the number line between 0 and 1 into two pieces of equal length.

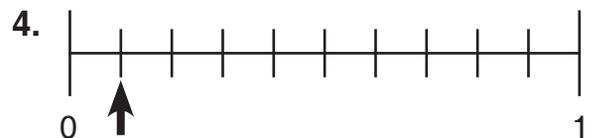
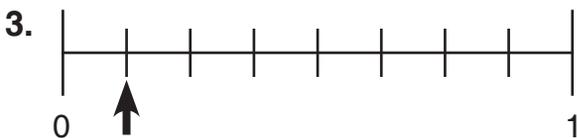
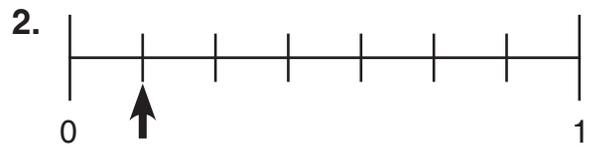
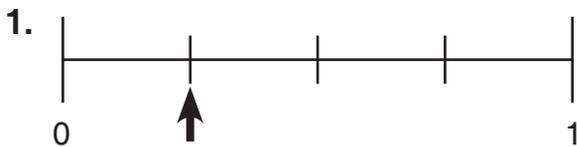
Each piece has a length of $\frac{1}{2}$.

The first piece begins at 0 and ends at $\frac{1}{2}$.



Fractions are Numbers!

PRACTICE | Label the number marked with an arrow on each number line below.



ERACCTIONS
Comparing Unit Fractions

A **unit fraction** is a fraction that has a numerator of 1.

We can compare unit fractions on a number line.

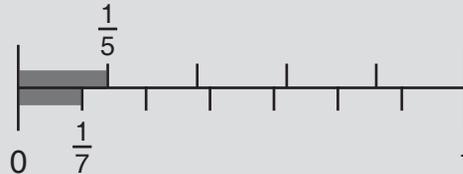


EXAMPLE | Which is greater, $\frac{1}{5}$ or $\frac{1}{7}$?

We can compare $\frac{1}{5}$ to $\frac{1}{7}$ on the number line.

To locate $\frac{1}{5}$, we divide the number line between 0 and 1 into five equal pieces. The first piece begins at 0 and ends at $\frac{1}{5}$.

To locate $\frac{1}{7}$, we divide the number line between 0 and 1 into seven equal pieces. The first piece begins at 0 and ends at $\frac{1}{7}$.

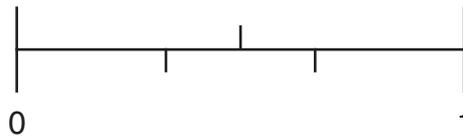


Since $\frac{1}{5}$ is to the right of $\frac{1}{7}$ on the number line,
 $\frac{1}{5}$ is greater than $\frac{1}{7}$.

The more equal pieces you divide something into, the smaller each piece must be!

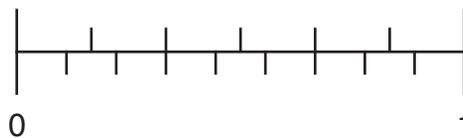
PRACTICE | Compare each pair of fractions given below.

5. Which is greater, $\frac{1}{2}$ or $\frac{1}{3}$?



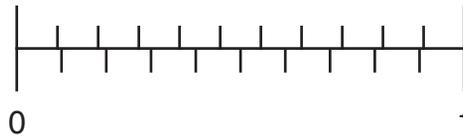
5. _____

6. Which is greater, $\frac{1}{6}$ or $\frac{1}{9}$?



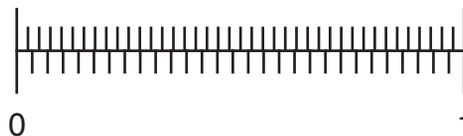
6. _____

7. Which is greater, $\frac{1}{11}$ or $\frac{1}{10}$?



7. _____

8. Which is greater, $\frac{1}{40}$ or $\frac{1}{29}$?



8. _____

9. Which is greater, $\frac{1}{91}$ or $\frac{1}{100}$?

9. _____



Some fractions
equal whole
numbers!

EXAMPLE

Write $\frac{15}{3}$ as a whole number.

Since fractions are another way to write division, $\frac{15}{3}$ means $15 \div 3$.

So, $\frac{15}{3}$ equals $15 \div 3 = 5$.

PRACTICE

Write each fraction below as a whole number.

10. $\frac{16}{8} = \underline{\quad}$

11. $\frac{48}{4} = \underline{\quad}$

12. $\frac{45}{9} = \underline{\quad}$

13. $\frac{75}{25} = \underline{\quad}$

14. $\frac{39}{13} = \underline{\quad}$

15. $\frac{12}{12} = \underline{\quad}$

PRACTICE

Fill in the numerator that will make each equation below true.

16. $\frac{\quad}{3} = 2$

17. $\frac{\quad}{7} = 10$

18. $\frac{\quad}{3} = 12$

19. $\frac{\quad}{6} = 9$

PRACTICE

Fill in the denominator that will make each equation below true.

20. $\frac{12}{\quad} = 2$

21. $\frac{56}{\quad} = 7$

22. $\frac{35}{\quad} = 5$

23. $\frac{36}{\quad} = 4$

FRACTIONS
Fraction Link

In these Fraction Link puzzles, we connect fractions and whole numbers that are equal.



In a **Fraction Link** puzzle, the goal is to connect each pair of equal numbers by a path.

- Paths may only go up, down, left or right through squares.
- Paths must begin and end at a number, but they may not pass *through* squares that contain numbers.
- Only one path may pass through each square.

Below is an example of a Fraction Link puzzle and its solution:

	$\frac{20}{5}$		
	$\frac{21}{7}$	6	
	$\frac{12}{2}$		
	$\frac{15}{3}$	3	
	4		5

	$\frac{20}{5}$		
	$\frac{21}{7}$	6	
	$\frac{12}{2}$		
	$\frac{15}{3}$	3	
	4		5

PRACTICE

Solve each Fraction Link puzzle below. We recommend using a pencil.

You can print more copies of these Fraction Link puzzles at BeastAcademy.com.

24.

1			
2		$\frac{10}{5}$	
3		$\frac{9}{3}$	
$\frac{6}{6}$			

25.

1			2
	$\frac{6}{2}$	$\frac{5}{5}$	
	$\frac{4}{2}$		
			3

26.

$\frac{8}{2}$			
		2	
		3	
		4	
$\frac{6}{3}$			$\frac{12}{4}$

27.

$\frac{11}{11}$			$\frac{12}{6}$
		3	
	2	$\frac{40}{10}$	
	4		$\frac{18}{6}$
			1