



Fuzzy Fraction Families

We can write the same fraction in many different ways. These are called equivalent fractions. To find an equivalent fraction you need to do exactly the same to the top (numerator) and the bottom (denominator) of the fraction. You can find equivalent fractions by multiplying the numerator and the denominator by the same number. Sometimes we call these sets fraction families.

To find an equivalent fraction for $\frac{1}{4}$ we can multiply the numerator and denominator by the same number. Here are some equivalent fractions for $\frac{1}{4}$:

$$\frac{1}{4} \xrightarrow{\times 2} \frac{2}{8} \xrightarrow{\times 2} \frac{4}{16} \xrightarrow{\times 2} \frac{8}{32}$$

A. Write some equivalent fractions in the Fuzzy monsters. Multiply the top and the bottom of the fraction by 2 each time.

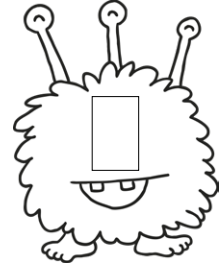
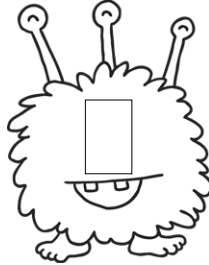
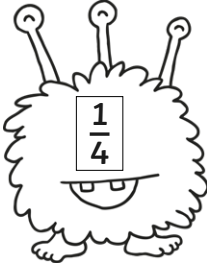
1.				
2.				
3.				
4.				
5.				



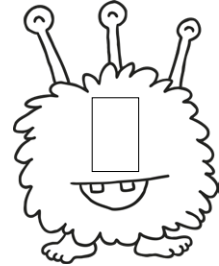
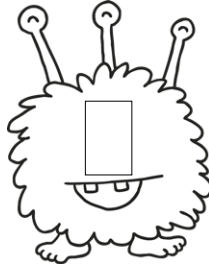
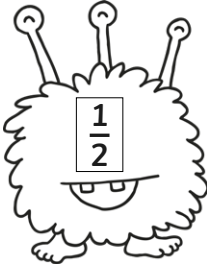
Fuzzy Fraction Families

B. Now try multiplying the numerator and denominator by 3 to find some equivalent fractions and complete these fraction families.

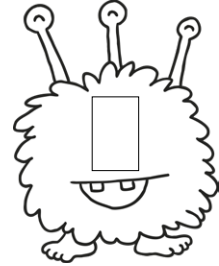
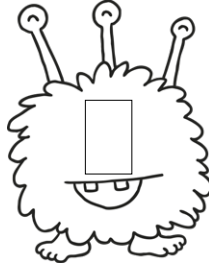
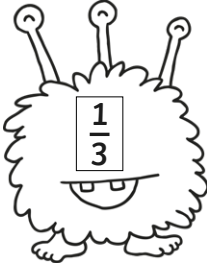
1.



2.



3.



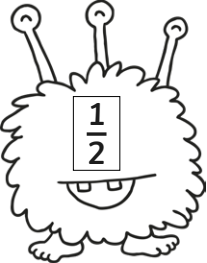
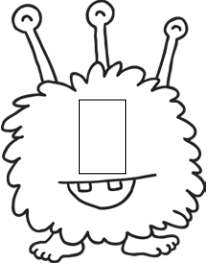
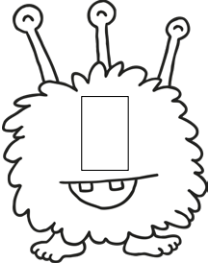
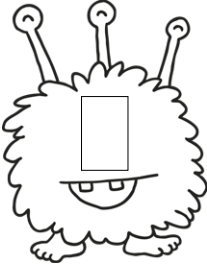
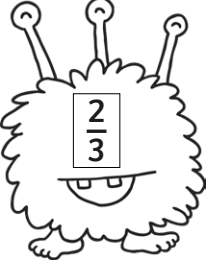
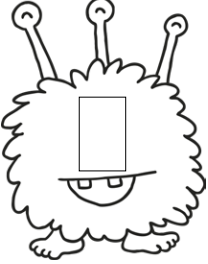
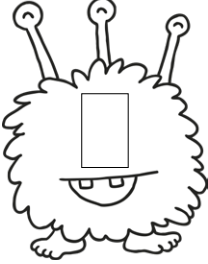
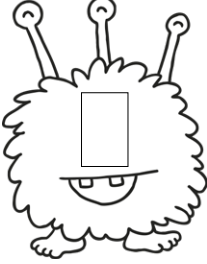
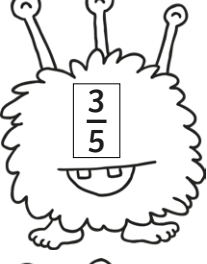
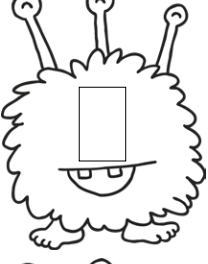
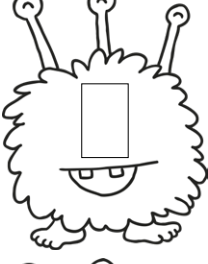
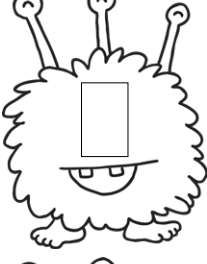
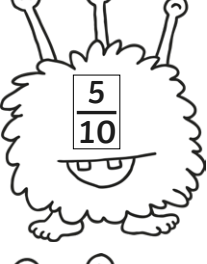
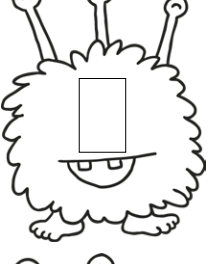
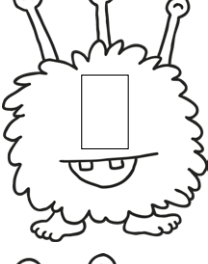
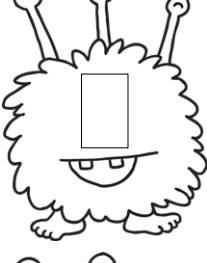
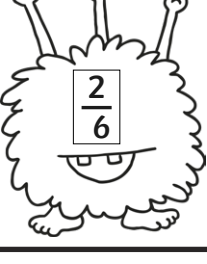
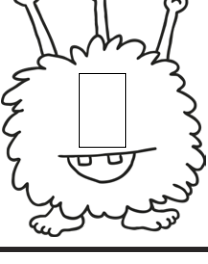
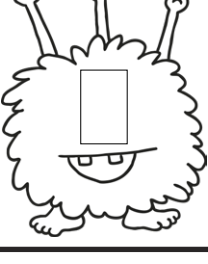
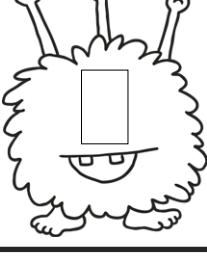
Fuzzy Fraction Families

We can write the same fraction in many different ways. These are called equivalent fractions. To find an equivalent fraction you need to do exactly the same to the top (numerator) and the bottom (denominator) of the fraction. You can find equivalent fractions by multiplying the numerator and the denominator by the same number. Sometimes we call these sets 'fraction families'.

To find an equivalent fraction for $\frac{1}{4}$ we can multiply the numerator and denominator by the same number. Here are some equivalent fractions for $\frac{1}{4}$:

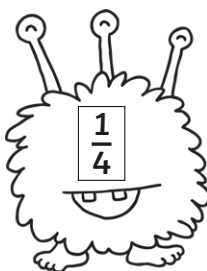
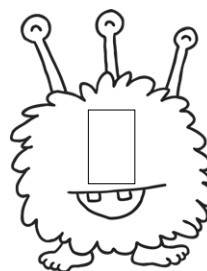
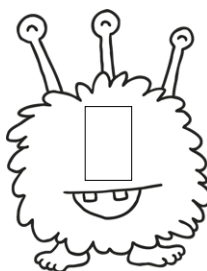
$$\frac{1}{4} \xrightarrow{\times 2} \frac{2}{8} \xrightarrow{\times 2} \frac{4}{16} \xrightarrow{\times 2} \frac{8}{32}$$

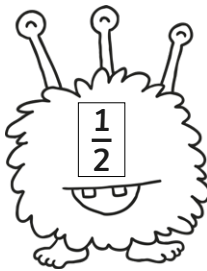
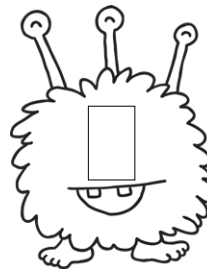
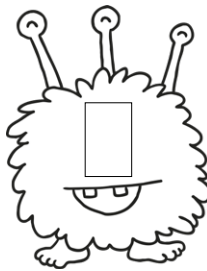
A. Write some equivalent fractions in the Fuzzy monsters. Multiply the top and the bottom of the fraction by 2 each time.

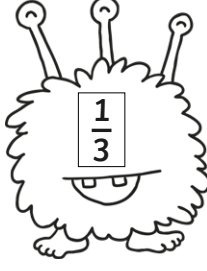
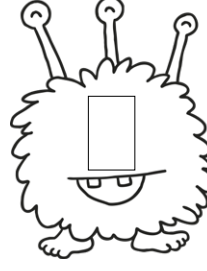
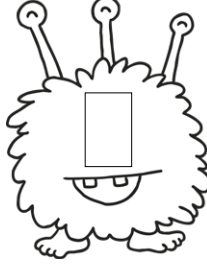
1.				
2.				
3.				
4.				
5.				

Fuzzy Fraction Families

B. Now try multiplying the numerator and denominator by any number to find some equivalent fractions for these Fuzzy Monsters.

1.   

2.   

3.   

Fuzzy Fraction Families

We can write the same fraction in many different ways. These are called equivalent fractions. To find an equivalent fraction you need to do exactly the same to the top (numerator) and the bottom (denominator) of the fraction. You can find equivalent fractions by multiplying the numerator and the denominator by the same number. Sometimes we call these sets 'fraction families'.

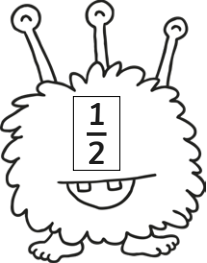
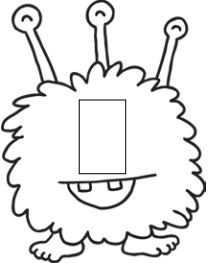
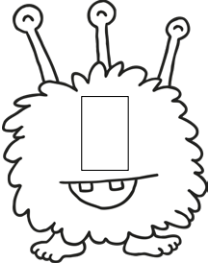
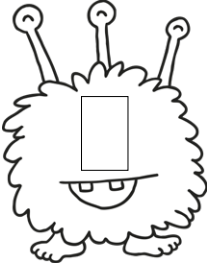
To find an equivalent fraction for $\frac{1}{4}$ we can multiply the numerator and denominator by the same number. Here are some equivalent fractions for $\frac{1}{4}$:

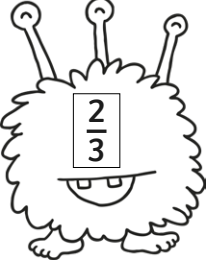
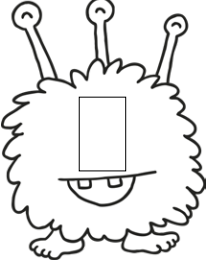
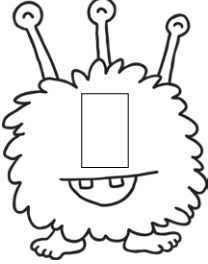
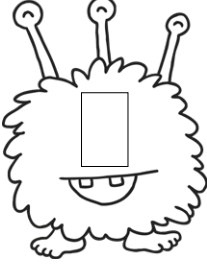
$$\frac{1}{4} = \frac{2}{8} = \frac{4}{16} = \frac{8}{32}$$

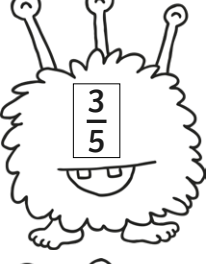
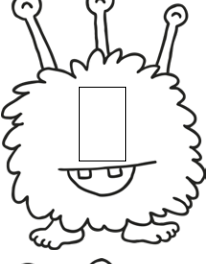
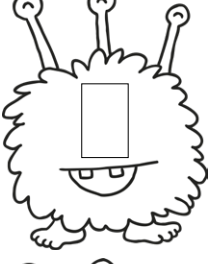
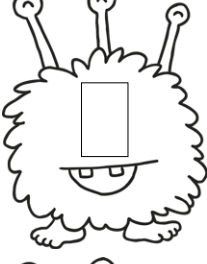
Diagram showing the progression of equivalent fractions for $\frac{1}{4}$. Arrows labeled 'x2' connect $\frac{1}{4}$ to $\frac{2}{8}$, $\frac{2}{8}$ to $\frac{4}{16}$, and $\frac{4}{16}$ to $\frac{8}{32}$.

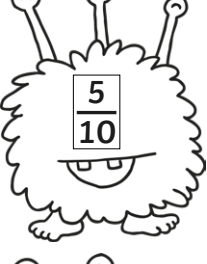
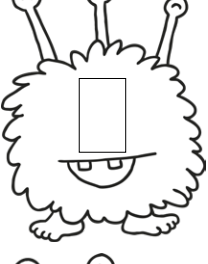
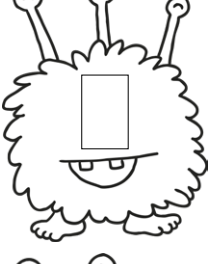
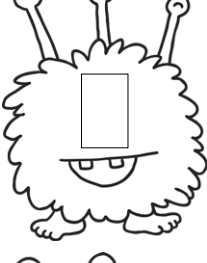
We found equivalent fractions by doubling the numerator and denominator each time.

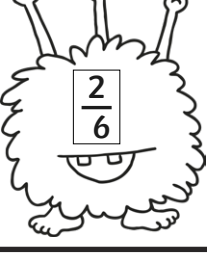
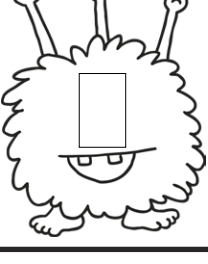
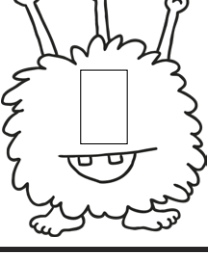
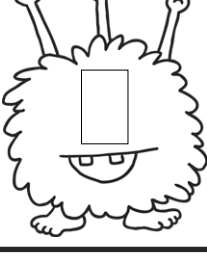
A. Write some equivalent fractions in the Fuzzy monsters. Multiply the top and the bottom of the fraction by the same number each time.

1.    

2.    

3.    

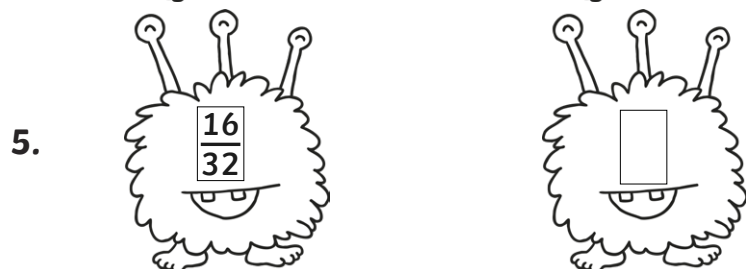
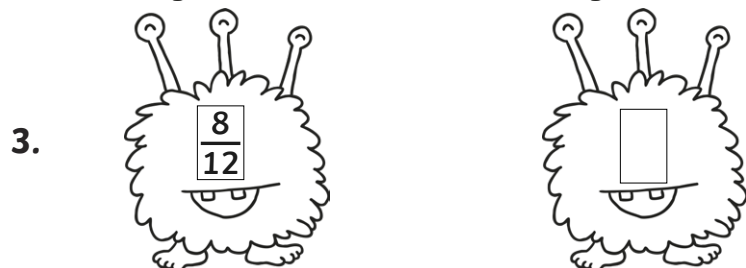
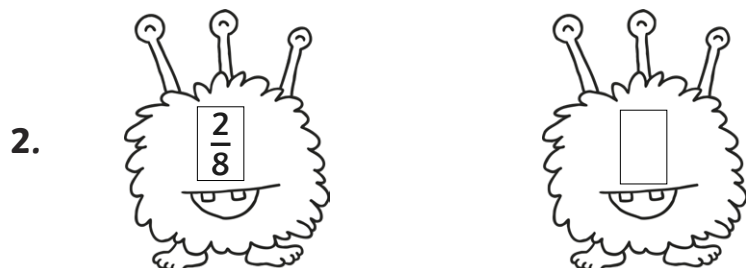
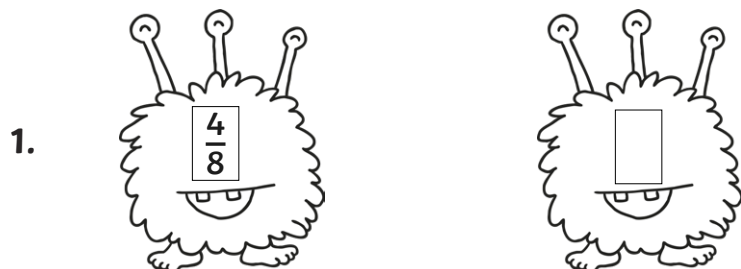
4.    

5.    



Fuzzy Fraction Families

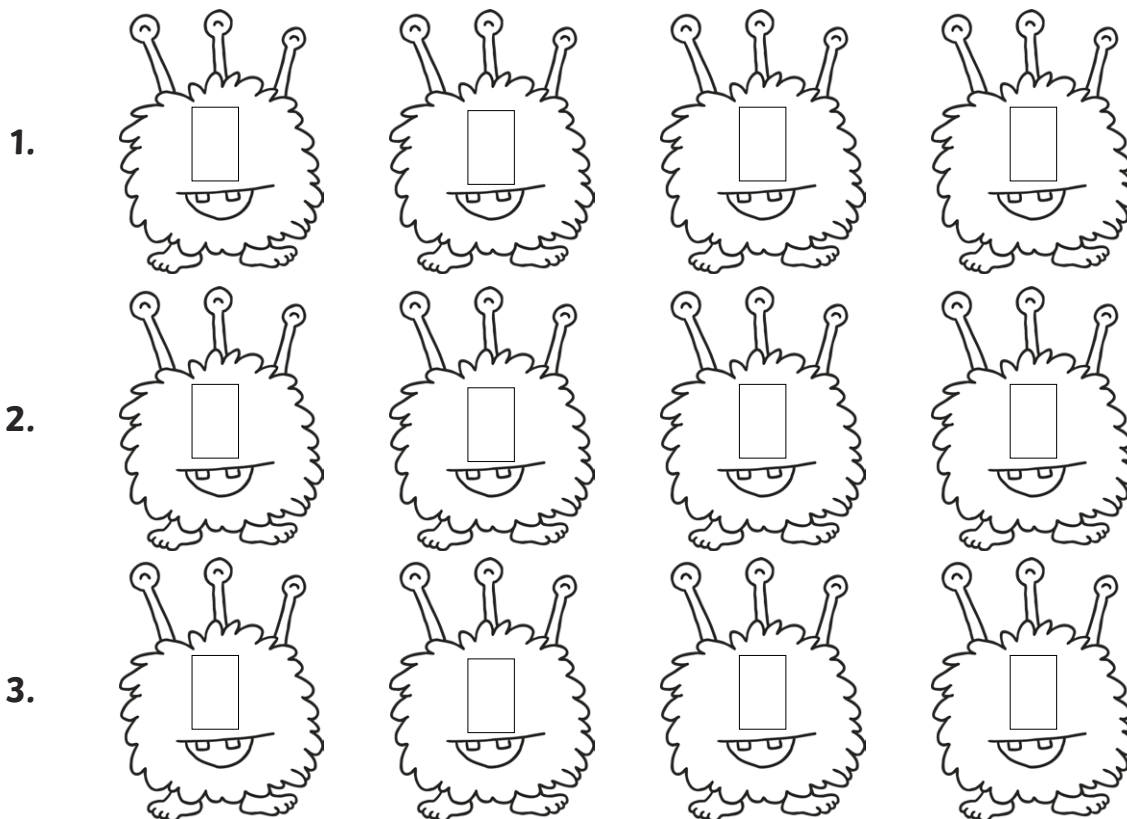
B. Now try halving the numerator and denominator to find an equivalent fraction for each of these Fuzzy Monsters.





Fuzzy Fraction Families

C. Can you make some more fuzzy fraction families of your own?



Fuzzy Fraction Families Answers

★					★★					★★★		
A					A					A	Multiple answers possible but must be equivalent fractions to:	
1.	$\frac{1}{2}$	$\frac{2}{4}$	$\frac{4}{8}$	$\frac{8}{16}$	1.	$\frac{1}{2}$	$\frac{2}{4}$	$\frac{4}{8}$	$\frac{8}{16}$	1.		$\frac{1}{2}$
2.	$\frac{1}{3}$	$\frac{2}{6}$	$\frac{4}{12}$	$\frac{8}{24}$	2.	$\frac{2}{3}$	$\frac{4}{6}$	$\frac{8}{12}$	$\frac{16}{24}$	2.		$\frac{2}{3}$
3.	$\frac{1}{5}$	$\frac{2}{10}$	$\frac{4}{20}$	$\frac{8}{40}$	3.	$\frac{3}{5}$	$\frac{6}{10}$	$\frac{12}{20}$	$\frac{24}{40}$	3.		$\frac{3}{5}$
4.	$\frac{1}{10}$	$\frac{2}{20}$	$\frac{4}{40}$	$\frac{8}{80}$	4.	$\frac{5}{10}$	$\frac{10}{20}$	$\frac{20}{40}$	$\frac{40}{80}$	4.		$\frac{5}{10}$
5.	$\frac{1}{6}$	$\frac{2}{12}$	$\frac{4}{24}$	$\frac{8}{48}$	5.	$\frac{2}{6}$	$\frac{4}{12}$	$\frac{8}{24}$	$\frac{16}{48}$	5.	$\frac{2}{6}$	
B					B.	Multiple answers possible but must be equivalent fractions.				B.		
1.	$\frac{1}{4}$	$\frac{3}{12}$	$\frac{9}{36}$							1.	$\frac{2}{4}$	
2.	$\frac{1}{2}$	$\frac{3}{6}$	$\frac{9}{18}$							2.	$\frac{1}{4}$	
3.	$\frac{1}{3}$	$\frac{3}{9}$	$\frac{9}{27}$							3.	$\frac{4}{6}$	
										4.	$\frac{3}{9}$	
										5.	$\frac{8}{16}$	
										c.	Multiple answers possible but must be equivalent fractions	