FRACTIONS

Fractions: A part of a whole... A fraction is where a whole has been separated into a given number of equal parts and some or all of those parts are being considered.

There are two main parts in a fraction,

DENOMINATORTotal number of parts which the whole is divided
equallyNUMERATORRepresent the number of parts being considered

Example:

NUMERATORNUMBER OF PARTS CONSIDEREDDENOMINATORTOTAL NUMBER OF PARTS A WHOLE IS DIVIDED

Look at the following figures and try to identify the size of the numerator and the denominator in each



EQUIVALENT FRACTIONS

Equivalent Fractions

When a similar amount of a whole is represented in a different ways they are called equivalent fractions

Example

1.

•	Diagram I										
		$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$			
	$\frac{1}{2}$							$\frac{1}{2}$			
According to t quivalent frac	he abo [,] ctions	ve diagi	ram	$\frac{1}{2} = \frac{2}{4}$	\langle	there	fore $\frac{1}{2}$	ar	nd -	$\frac{2}{4}$ are	called
	Diagra	um 2								7	
	$\frac{1}{3}$			$\frac{1}{3}$			$\frac{1}{3}$				
	$\frac{1}{6}$		$\frac{1}{6}$	$\frac{1}{6}$		$\frac{1}{6}$	$\frac{1}{6}$		$\frac{1}{6}$		
	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$		

The Diagram 2, shows that the fractions called equivalent fractions.

1_	2	_ 3	therefore	1	2	$2 \qquad 3$	could b	be
3	6	9	therefore	3'	6	<u>9</u>	could t	

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3. **Diagram 3** $\frac{2}{4}$ $\frac{4}{8}$ $\frac{1}{2}$ $\frac{3}{6}$ $\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8}$ Therefore, fractions $\frac{1}{2}, \frac{2}{4}, \frac{3}{6}$ and $\frac{4}{8}$ According to the diagram 3, are equivalent. 4. $\frac{1 \times 2}{2 \times 2} = \frac{2}{4}$ or $\frac{2 \div 2}{4 \div 2} = \frac{1}{2}$ $\frac{1 \times 3}{2 \times 3} = \frac{3}{6}$ or $\frac{3 \div 3}{6 \div 3} = \frac{1}{2}$ $\frac{1 \times 4}{2 \times 4} = \frac{4}{8}$ or $\frac{4 \div 4}{8 \div 4} = \frac{1}{2}$ $\frac{2 \times 2}{4 \times 2} = \frac{4}{8} \quad or \quad \frac{4 \div 2}{8 \div 2} = \frac{2}{4} \implies \frac{2 \div 2}{4 \div 2} = \frac{1}{2}$ 5. $\frac{3}{5}$ $\Rightarrow \quad \frac{3 \times 2}{5 \times 2} = \frac{6}{10} \qquad \text{THEREFORE} \qquad \frac{3}{5} = \frac{6}{10}$ $\Rightarrow \qquad \frac{50 \div 10}{60 \div 10} = \frac{5}{6} \qquad \text{THEREFORE} \qquad \qquad \frac{50}{60} = \frac{5}{6}$ 50 60 $\Rightarrow \quad \frac{6 \div 3}{9 \div 3} = \frac{2}{3} \qquad \text{AND} \quad \frac{2 \times 2}{3 \times 2} = \frac{4}{6}$ $\frac{6}{9}$ THEREFORE $\frac{6}{9} = \frac{4}{6}$

Now try the questions in worksheets 'Equivalent Fractions' on worksheets

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