

FRACTIONS, DECIMALS, PERCENTS

PURPOSE

This Maths sheet introduces decimals and percents.

PREPARATION

You need a pencil. A metre stick is helpful in showing how 100 can be divided into fractions.

PROCEDURE

Teach your child the equivalencies and then have him or her do the practice questions. As progress is made towards mastery, the equivalencies table can be covered to reduce referencing.

In Mathematics, there are two other ways to express fractions: decimals and percentages. For example, the fraction $\frac{1}{2}$ can also be stated as 0.5 or 50%.

To convert a fraction to its decimal equivalent, divide the numerator by the denominator (it may be necessary to teach your child to divide and multiply with decimals). $\frac{1}{2} = 0.50$.

$$\begin{array}{r}
 0.50 \\
 2 \overline{) 1.00} \\
 \underline{2 } \\
 00 \\
 \underline{00} \\
 00 \\
 \underline{00} \\
 0
 \end{array}$$

To find the percentage equivalent of a fraction, multiply its decimal by 100. (A handy way to remember this is to note that the symbol % is made up of a one and two zeroes.) $0.50 \times 100 = 50\%$.

Here is a list of the most common fraction equivalents. Most people just memorize them.

FRACTIONS									DECIMALS	PERCENTS
$\frac{2}{2}$		$\frac{3}{3}$		$\frac{4}{4}$		$\frac{5}{5}$		$\frac{10}{10}$	1.000	100.0%
								$\frac{9}{10}$	0.900	90.0%
							$\frac{7}{8}$		0.875	87.5%
						$\frac{4}{5}$		$\frac{8}{10}$	0.800	80.0%
			$\frac{3}{4}$				$\frac{6}{8}$		0.750	75.0%
								$\frac{7}{10}$	0.700	70.0%
		$\frac{2}{3}$							0.667	66.7%
							$\frac{5}{8}$		0.625	62.5%
					$\frac{3}{5}$			$\frac{6}{10}$	0.600	60.0%
$\frac{1}{2}$			$\frac{2}{4}$				$\frac{4}{8}$	$\frac{5}{10}$	0.500	50.0%
					$\frac{2}{5}$			$\frac{4}{10}$	0.400	40.0%
							$\frac{3}{8}$		0.375	37.5%
		$\frac{1}{3}$							0.333	33.3%
								$\frac{3}{10}$	0.300	30.0%
			$\frac{1}{4}$				$\frac{2}{8}$		0.250	25.0%
					$\frac{1}{5}$			$\frac{2}{10}$	0.200	20.0%
							$\frac{1}{8}$		0.125	12.5%
								$\frac{1}{10}$	0.100	10.0%

Fraction	Decimal	Percent
1/2	0.50	50%
1/4	0.25	
3/4	0.75	
1/10	0.10	
2/5	0.40	
1/5		20%
1/4		25%
3/4		75%
2/2		100%
1/3	0.333	
2/3	0.667	
	0.20	20%
3/3		100%
3/4		75%
1/8	0.125	
3/8	0.375	
5/8		62.5%
3/10	0.30	
4/5		80%
7/10	0.70	

Fraction	Decimal	Percent
5/5		
1/8		
	0.75	
	0.40	
		33.3%
		25%
7/8		
	0.10	
		20%
	.0375	
2/3		
	0.50	
		60%
		66.7%
3/4		
7/10		
	0.90	
	0.125	
		30%
3/5		