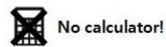
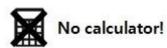
Multiplying Fractions Homework



Literacy	Research	Memory	
$rac{3}{4}$ means the same as $3 \div 4$	What is the definition of 'factorial' ?	• To find a fraction of any number,	
	Note: '7 factorial' is written 7! (the symbol is as an exclamation mark).	multiply by the numerator and divide by the denominator.	
This means that multiplying by $\frac{3}{4}$,,	divide by the denominator.	
is the same as $ imes$ ${f 3}$ and \div ${f 4}$		 To find a fraction of a fraction, 	
$3 f^2 \qquad 3 2$	Use your definition to find:	multiply the numerators to find the	
$\frac{3}{4}$ of $\frac{2}{3}$ means the same as $\frac{3}{4} \times \frac{2}{3}$	-	new numerator, and multiply the denominators to find the new	
which is $\frac{3 \times 2}{4 \times 3} = \frac{6}{12} = \frac{1}{2}$	$3! = 5! = \frac{5!}{3!} = \frac{3!}{5!} =$	denominator.	
Skills		Stretch	
1) $\frac{4}{5} \times \frac{2}{7} =$	5) $\frac{14}{15} \times \frac{3}{4} =$	1) $\frac{28}{45} \times \frac{5}{14} =$	
2) $\frac{2}{5} \times \frac{4}{7} =$	6) $\frac{15}{8} \times \frac{2}{7} =$	2) $\frac{2}{5} \times \frac{3}{4} \times \frac{5}{3} =$	
3) $\frac{6}{17} \times \frac{3}{10} =$	7) $\frac{13}{17} \times \frac{1}{2} =$	3) $\frac{4}{7} \times \frac{3}{10} \times \frac{7}{11} =$	
4) $\frac{8}{25} \times \frac{5}{12} =$	8) $\frac{8}{9} \times \frac{6}{7} =$	4) $\frac{1}{2} \times \frac{2}{3} \times \frac{3}{4} \times \frac{4}{5} \times \frac{5}{6} =$	
Simplify your answers where possible. Show ALL your working.			

You need to **read** and **learn** the *Literacy* and *Memory* sections, **look up** answers to the *Research* section, **answer all** questions from the *Skills* section, and (unless you have already spent more than 45 minutes on this homework) **attempt** the *Stretch* section. Answers can be written on the sheet or in your book if you need more space.

Multiplying Fractions Homework



Literacy	Research	Memory	
$rac{3}{4}$ means the same as $3 \div 4$	What is the definition of 'factorial' ? <i>Note:</i> '7 <i>factorial' is written</i> 7! (the	 To find a fraction of any number, multiply by the numerator and 	
This means that multiplying by $\frac{3}{4}$	symbol is as an exclamation mark). $n! = n(n-1)(n-2) \dots (2)(1)$	divide by the denominator.	
is the same as $ imes$ 3 and \div 4	Use your definition to find: $3! = 3 \times 2 \times 1 = 6$	• To find a fraction of a fraction,	
$\frac{3}{4}$ of $\frac{2}{3}$ means the same as $\frac{3}{4} \times \frac{2}{3}$	$5! = 5 \times 4 \times 3 \times 2 \times 1 = 120$ $5! 5 \times 4 \times 3 \times 2 \times 1$	multiply the numerators to find the new numerator, and multiply the	
which is $\frac{3 \times 2}{4 \times 3} = \frac{6}{12} = \frac{1}{2}$	$\frac{5!}{3!} = \frac{5 \times 4 \times 3 \times 2 \times 1}{3 \times 2 \times 1} = 5 \times = 20$	denominators to find the new denominator.	
	$\overline{5!} = \overline{20}$		
Skills		Stretch	
1) $\frac{4}{5} \times \frac{2}{7} = \frac{8}{35}$	5) $\frac{14}{15} \times \frac{3}{4} = \frac{42}{60} = \frac{7}{10}$	$1)\frac{28}{45} \times \frac{5}{14} = \frac{2}{9}$	
2) $\frac{2}{5} \times \frac{4}{7} = \frac{8}{35}$	$6)\frac{15}{8} \times \frac{2}{7} = \frac{30}{56} = \frac{15}{28}$	2) $\frac{2}{5} \times \frac{3}{4} \times \frac{5}{3} = \frac{1}{2}$	
$3)\frac{6}{17} \times \frac{3}{10} = \frac{18}{170} = \frac{9}{85}$	7) $\frac{13}{17} \times \frac{1}{2} = \frac{13}{34}$	$3)\frac{4}{7} \times \frac{3}{10} \times \frac{7}{11} = \frac{6}{55}$	
25 12 500 15	8) $\frac{8}{9} \times \frac{6}{7} = \frac{48}{63} = \frac{16}{21}$ ossible. Show ALL your working.	4) $\frac{1}{2} \times \frac{2}{3} \times \frac{3}{4} \times \frac{4}{5} \times \frac{5}{6} = \frac{1}{6}$	

You need to **read** and **learn** the *Literacy* and *Memory* sections, **look up** answers to the *Research* section, **answer all** questions from the *Skills* section, and (unless you have already spent more than 45 minutes on this homework) **attempt** the *Stretch* section. Answers can be written on the sheet or in your book if you need more space.