Grade 5 – Book B

(CAPS edition) Revised for 2023

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Chapter B1 **Fractions**

<u>Exer</u>

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Exerci	se 1: Date:	-
(1) Ans	swer the questions.	
(a)	How many elements are there in the block?	
(b)	How many elements are arrows?	
(c)	What fraction of the elements is arrows?	
(d)	What fraction of the elements is not arrows?	
(e)	What fraction is quadrilaterals?	
(f)	What fraction is not quadrilaterals?	
(g)	What fraction is triangles?	
(h)	What fraction is not triangles?	
(i)	What fraction of the elements is circles?	
(j)	What fraction of the elements is not circles or triangles?	

(2) What fraction is shaded and what fraction is not shaded?

		FRACTION SHADED	FRACTION NOT SHADED
(a)			
(b)			
(c)			
(d)	\otimes		

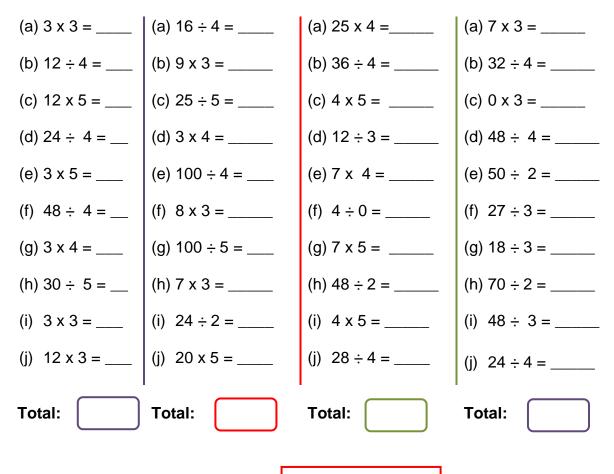
3

MULTIPLICATION AND DIVISION (Speed test) (2x - 5x)

Exercise B1A:

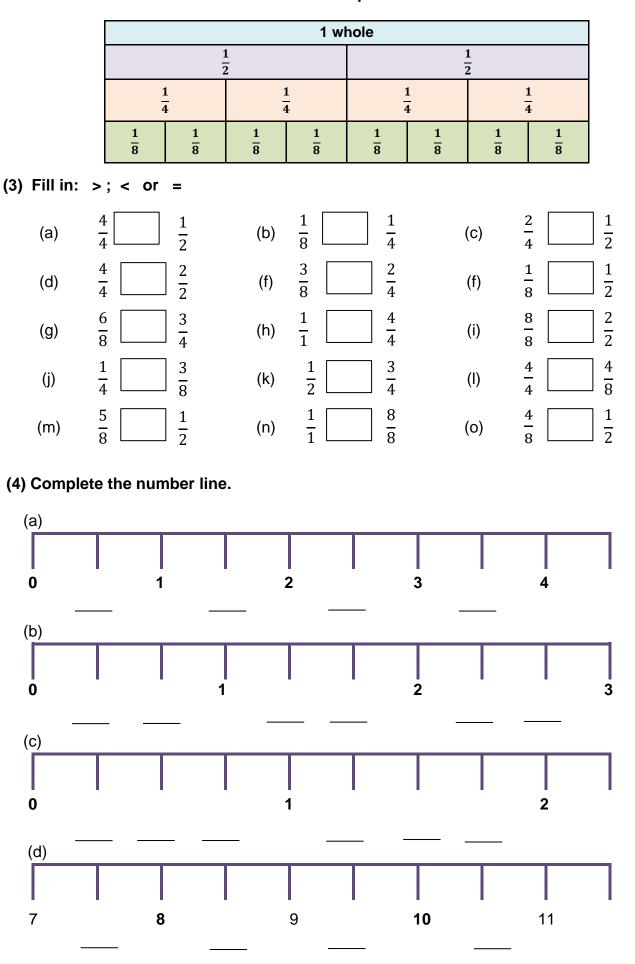
Date: _____

Write down the answer.



Total out of 40:

4

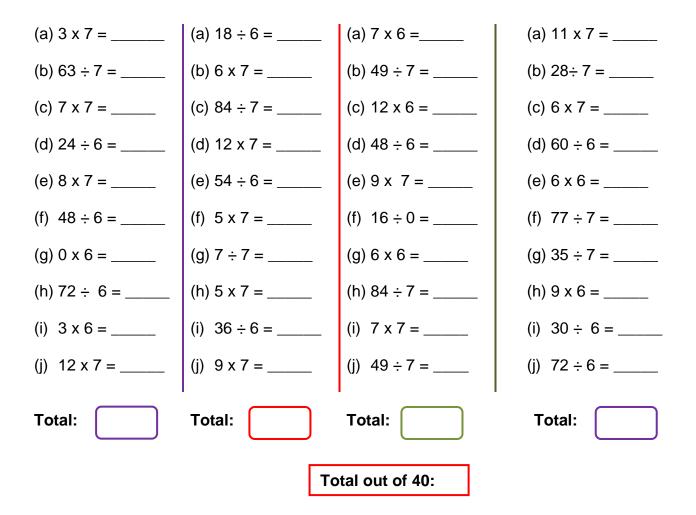


Use the table to compare the fractions.

MULTIPLICATION AND DIVISION (Speed test) (6x - 7x)

Exercise B1B:

Date: _____

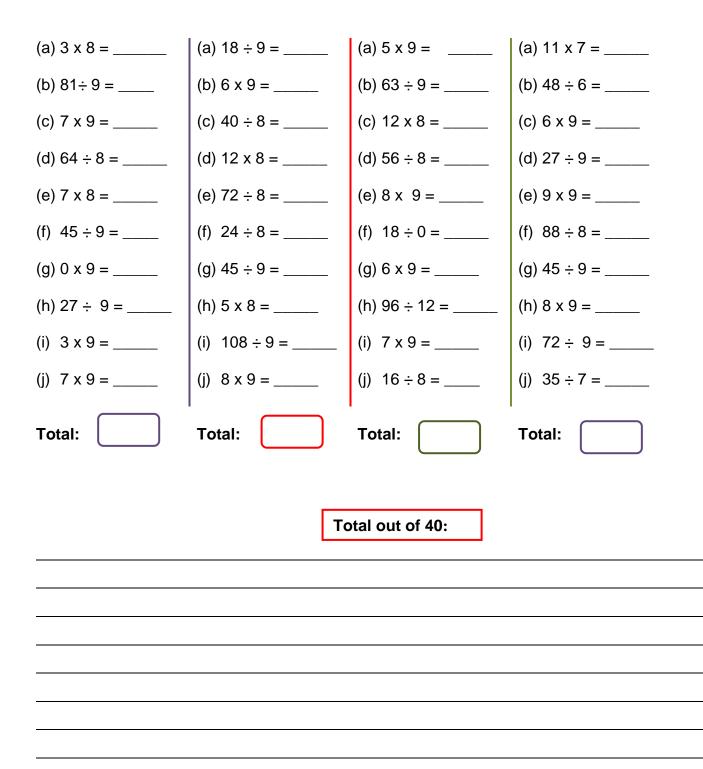


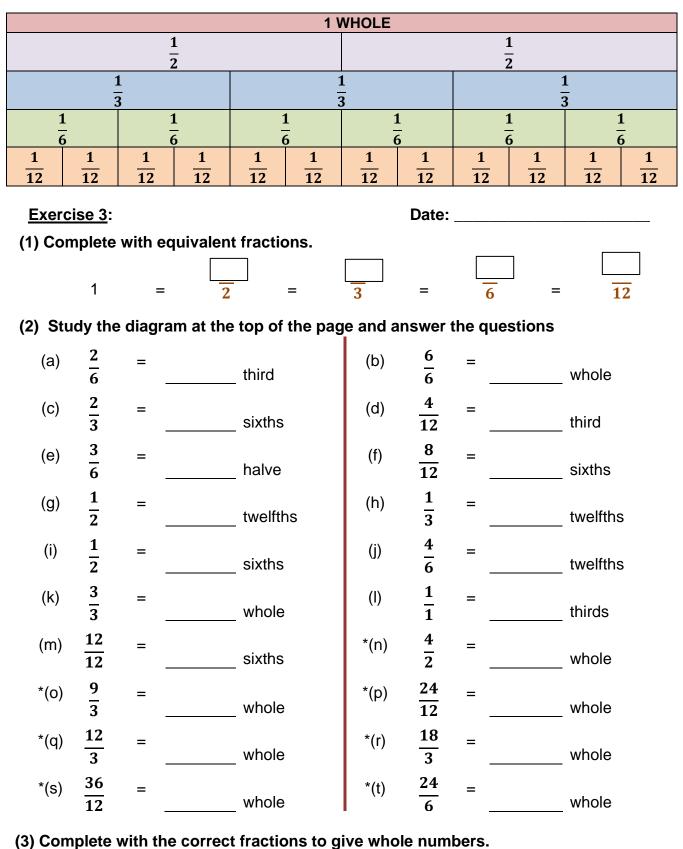
PROPE		ON	IN	MPRO		MIXED NUMBER				
	$\frac{3}{4}$			<u>5</u> 4		$1\frac{1}{4}$				
The fraction i The numera than the		ore less	The n	The fraction is greater than 1 whole. The numerator is therefore greater than the denominator.				The fraction is greater than 1 whole.		
<u>Exercise 2</u> :					Date:					
(1) Classify th 1 3		s as propo	er fracti 4 3	ions,	improper frac <u>1</u> 5	tions or	mixe	mixed numbers. $1\frac{1}{5}$		
fract	tion	fra	ction		fraction	n		numbe	r	
(2) Encircle a $\frac{7}{8}$	Il the fracti $\frac{4}{5}$	ions that a $\frac{3}{8}$				$\frac{8}{8}$		$\frac{7}{5}$	$1\frac{7}{8}$	
(3) How many	v whole nu	mbers are	e there i	in eac	h of the follo	wing?				
(a)	$\frac{1}{2}$ $\frac{6}{3}$	=	_	(b)		$\frac{9}{3}$	= _			
(c)	$\frac{12}{4}$	=		(d)		$\frac{10}{5}$	= _			
(e) ?	$\frac{8}{2}$	=	_	(f)	?	$\frac{16}{4}$	= _			
(g) ?	$\frac{20}{2}$	=	_	(h)	?	$\frac{36}{4}$	= _		-	
(i) ?	$\frac{12}{4}$	=	_	(j)	?	$\frac{18}{2}$	= _		-	
(4) What fract	ion is sha	ded in eac	h case		te this as a m	ixed nur	nber a	as well		
(a)		→		(b)			-	•		
(c)		→		(d)				•		
(e)		➡		(f)				•		

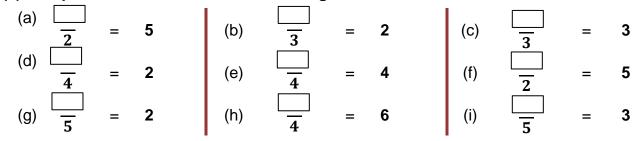
MULTIPLICATION AND DIVISION (Speed test) (8x - 9x)

Exercise B1C:

Date: _____



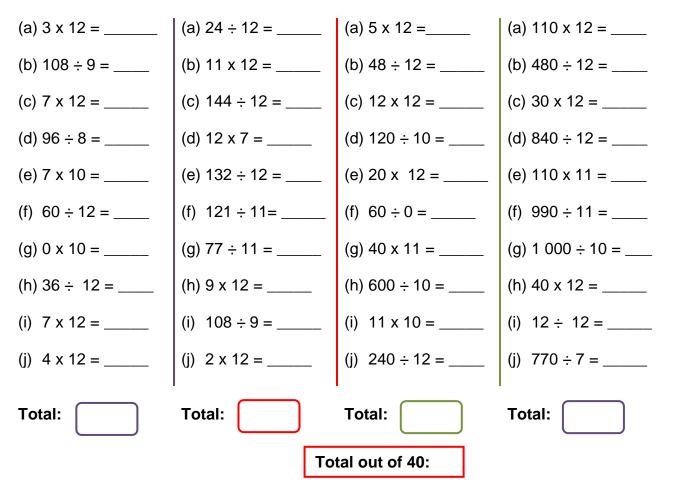




MULTIPLICATION AND DIVISION (Speed test) (10x - 12x)

Exercise B1D:

Date: _____



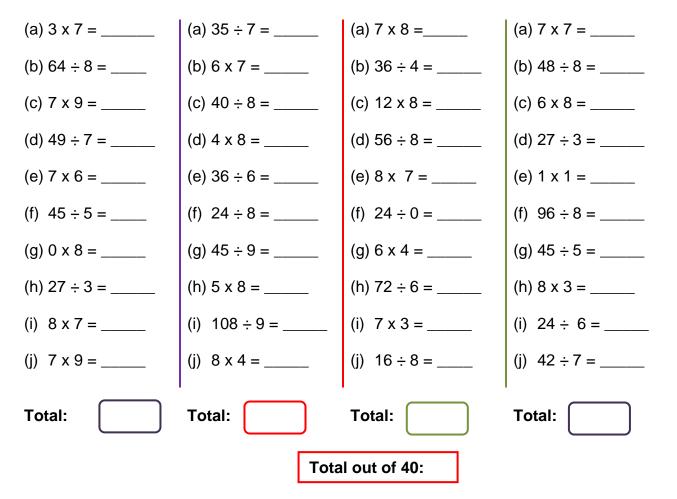
Mixed numbers and improper fractions

<u>Exercis</u>	<u>e 4</u> :				Dat	e:		
• •	ow many mains?	whole	numbers are	e there	in each ca	ase, and h	ow m	uch of the fraction
	9		5 4					
(a)	5	= _	$\frac{1}{5} + \frac{1}{5}$	_ = _	1 hele	_ and	4	fifths
(b)	$\frac{11}{6}$	= _		_ = _		and		sixths
(c)	$\frac{9}{7}$	=		_ = _		and		sevenths
(d)	$\frac{15}{6}$	=		=		and		sixths
()	7	-						-
*(e)	3 19	= _		=		and		_ third
*(f)	79	= _		=		and		sevenths
(g)	6	= _		=		and		_ sixths
(h)	6 5	= _		_ = _		and		_ fifth
(2) W	rite it the	other v	vay round.					
			-					
(a)	$1\frac{3}{5}$	=				=		
(b)	$2\frac{2}{3}$	=				=		
(c)	$1\frac{3}{7}$	=				=		
(d)	$1\frac{5}{6}$	-						
(u) (e)	$6 2\frac{1}{3}$	= _						
(0) (f)	$2\frac{1}{7}$	=						
	$2\frac{2}{4}$							
(g)	-					=		
(3) Writ			following d	rawing	S.			
	Blocks	shaded						Improper Fraction
(a)			=	wh	ole	_quarters	or	
(b)			=	wh	ole	halve	or	
(c)			=	vvr			or	
				wh	ole	third	or	

MULTIPLICATION AND DIVISION (Speed test) (2x - 8x)

Exercise B1E:

Date: _____



Exercise 5:

Date: _____

 $\frac{1}{2} \times \frac{3}{3} = \frac{3}{6}$ therefore: $\frac{1}{2} = \frac{3}{6}$

(1) Write down equivalent fractions.

<u>GOLDEN RULE</u>: Multiply or divide both top and bottom by the same number.

(a) $\frac{1}{2} \times \frac{3}{3} = \frac{3}{6}$	(b) $\frac{1}{3} \times \frac{2}{2} =$	(c) $\frac{1}{3} \times \frac{3}{3} = $
	(e) $\frac{3}{4} \times \underline{\qquad} = \frac{9}{12}$	(f) $\frac{3}{4} \times \frac{5}{5} =$
(g) $\frac{3}{6} \times \underline{\qquad} = \frac{6}{12}$	(h) $\frac{5}{8} \times _ = \frac{10}{16}$	(i) $\frac{1}{9} \times \frac{2}{2} =$
(j) $\frac{4}{7} \times \underline{\qquad} = \frac{8}{14}$	(k) $\frac{3}{6} \times \underline{\qquad} = \frac{6}{12}$	(I) $\frac{2}{3} \times \frac{5}{5} =$
(m) $\frac{4}{9} \times \underline{\qquad} = \frac{40}{90}$	(n) $\frac{2}{9} \times \underline{\qquad} = \frac{18}{81}$	(o) $\frac{1}{5} \times \frac{14}{14} =$

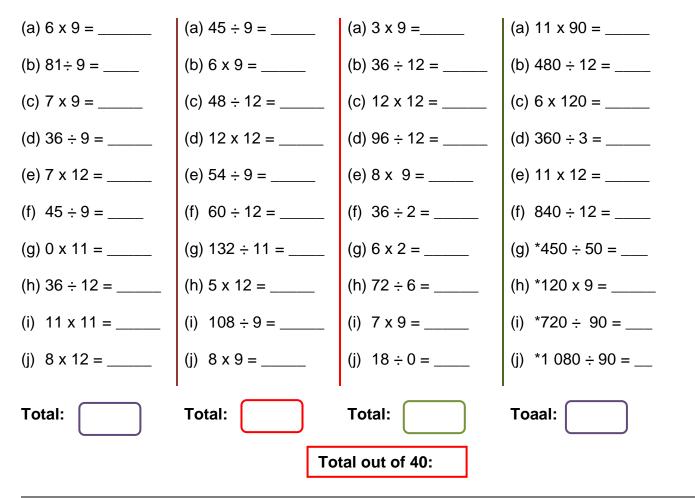
(2) Write the correct numbers in the blank spaces to make each statement true.

(a)	$\frac{1}{2} = \frac{1}{6}$	(b) $\frac{1}{2} = -\frac{1}{4}$	(c) $\frac{1}{2} = \frac{1}{8}$	(d) $\frac{1}{2} = -\frac{10}{10}$
(e)	$\frac{1}{4} = -8$	(f) $\frac{1}{4} = \frac{1}{12}$	(g) $\frac{1}{4} = -\frac{1}{20}$	(h) $\frac{1}{4} = -\frac{16}{16}$
(i)	$\frac{1}{3} =$	(j) $\frac{1}{3} = \frac{1}{12}$	(k) $\frac{1}{3} = \frac{1}{18}$	(l) $\frac{1}{3} =$
(m)	$\frac{1}{5} = -10$	(n) $\frac{1}{5} = \frac{1}{40}$		(p) $\frac{1}{5} =$
(q)	$\frac{2}{6} = -\frac{12}{12}$	(r) $\frac{4}{5} = \frac{15}{15}$	(s) $\frac{2}{3} = \frac{30}{30}$	(t) $\frac{4}{6} =$
		(v) $\frac{4}{8} = \frac{32}{32}$		(x) $\frac{4}{6} = -\frac{36}{36}$

MULTIPLICATION AND DIVISION (Speed test) (9x - 12x)

Exercise B1F:

Date: _____



More equivalent fractions (simplify)

GOLDEN RULE: Multiply or divide both top and bottom by the same number. (a) $\frac{6}{12} \div \frac{6}{6} = \frac{1}{2}$ (b) $\frac{9}{12} \div \frac{3}{3} =$ (c) $\frac{4}{8} \div \frac{4}{4} =$ (d) $\frac{6}{8} \div \frac{2}{2} =$ (e) $\frac{12}{15} \div \frac{3}{3} =$ (f) $\frac{5}{10} \div \frac{5}{5} =$ (g) $\frac{7}{14} \div$ (g) $\frac{7}{14} \div$ (h) $\frac{8}{16} \div$ (h) $\frac{8}{16} \div$ (i) $\frac{9}{18} \div$ (j) $\frac{18}{21} \div \frac{3}{3} =$ (k) $\frac{12}{24} \div \frac{12}{12} =$ (l) $\frac{24}{30} \div \frac{6}{6} =$ (n) $\frac{9}{27} \div \frac{9}{9} =$ (o) $\frac{15}{20} \div \frac{5}{5} =$

(2) Supply the correct numbers to make each statement true: L

$$\begin{array}{c|c} (a) & \underline{\quad} & = \frac{1}{2} \\ (b) & \underline{\quad} & = \frac{1}{2} \\ (b) & \underline{\quad} & = \frac{1}{2} \\ (c) & \underline{\quad} &$$

(3) How many whole numbers are there?

(a)	$\frac{12}{6} =$	(b)	$\frac{14}{7} =$	(c)	$\frac{21}{3} =$	
(d)	$\frac{18}{6} =$	(e)	$\frac{24}{6} =$	 (f)	$\frac{30}{6} =$	
(g)	$\frac{16}{4} =$	(h)	$\frac{20}{5} =$	 (i)	$\frac{28}{4} =$	

Exercise 6:

Date:

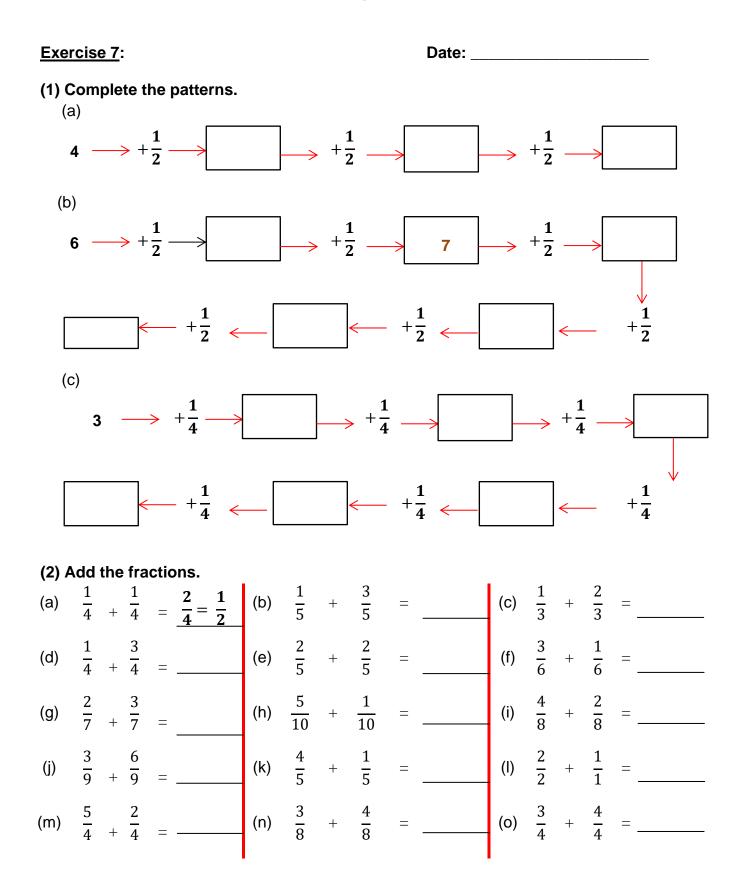
 $\frac{6}{12} \div \frac{6}{6} = \frac{1}{2}$ therefore: $\frac{3}{6} = \frac{1}{2}$

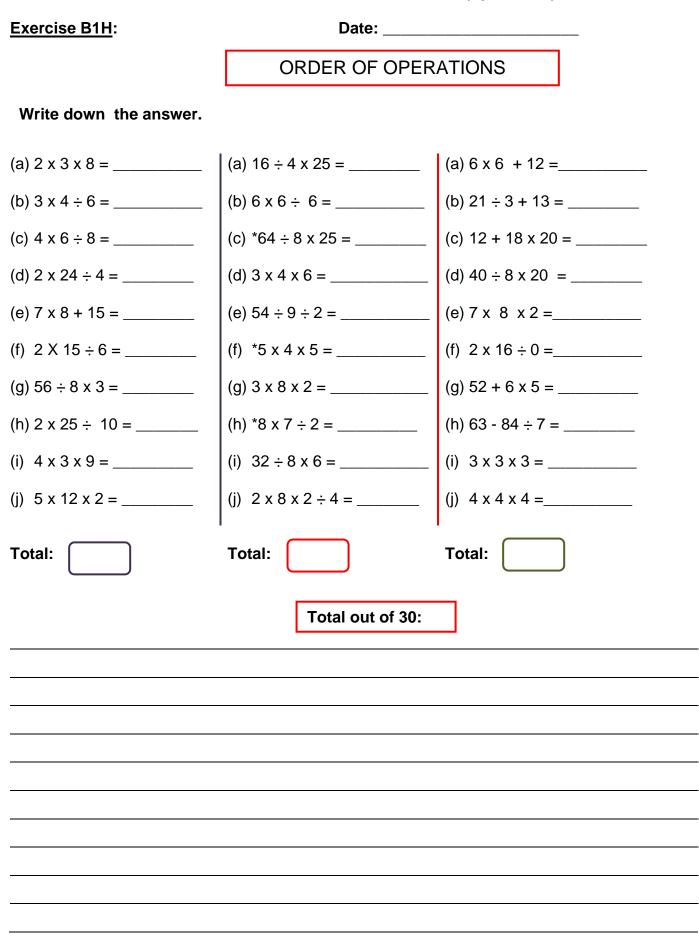
(1) Write down equivalent fractions.

MULTIPLICATION AND DIVISION (Speed test)

Exercise B1G:	Date	Date:				
	ORDER OF OPER	RATIONS				
Write down the answer.						
(a) 6 x 6 + 4 =	(a) 50 - 45 ÷ 5 =	(a) 35 + 5 x 7 =				
(b) 5 + 81÷ 9 =	(b) 90 - 5 x 9 =	(b) 9 + 48 ÷ 8 =				
(c) 70 - 7 x 9 =	(c) 70 – 7 x 5 =	(c) 7 + 12 x 12 =				
(d) 100 – 25 x 2 =	(d) 150 - 12 x 12 =	(d) 8 + 56 ÷ 8 =				
(e) 24 - 2 x 12 =	(e) 120 – 20 x 3 =	(e) 80 - 8 x 5 =				
(f) 40 - 45 ÷ 9 =	(f) 100 – 5 x 5 =	(f) 75 - 24 ÷ 8 =				
(g) 12 - 0 x 11 =	(g) 20 - 81 ÷ 9 =	(g) 65 - 4 x 9 =				
(h) 18 - 36 ÷ 3 =	(h) 80 - 8 x 8 =	(h) 15 + 72 ÷ 6 =				
(i) 50 - 6 x 5 =	(i) 40 + 64 ÷ 8 =	(i) 4 + 7 x 9 =				
(j) 40 - 7 x 5 =	(j) 25 + 8 x 8 =	(j) 18 + 64 ÷ 8 =				
Total:	Total:	Total:				
	Total out of 30:					

Adding fractions





Exercise 8:

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Date: _____
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(1) Add the fractions and simplify the answer.

(a)	$\frac{3}{16}$ +	5 16	$=$ $\frac{8}{16}$ \div	$\frac{8}{8}$	=	$\frac{1}{2}$	(b)	$\frac{4}{15}$ +	$\frac{8}{15} = \underline{\qquad} \div \frac{3}{3} = \underline{\qquad}$
(c)	$\frac{2}{8}$ +	$\frac{2}{8}$	=÷	$\frac{4}{4}$	=		(d)	$\frac{12}{20}$ +	$\frac{3}{20} = \underline{\qquad} \div \frac{5}{5} = \underline{\qquad}$
(e)	$rac{11}{18}$ +	$\frac{1}{18}$	= ÷	$\frac{6}{6}$	=		(f)	$\frac{24}{50}^+$	$\frac{6}{50} = \underline{\qquad} \div \frac{10}{10} = \underline{\qquad}$
(g)	$\frac{15}{30}$ +	5 30	=÷	$\frac{10}{10}$	=		(h)	$\frac{6}{12}$ +	$\frac{2}{12} = \underline{\qquad} \div \frac{4}{4} = \underline{\qquad}$
(i)	$\frac{25}{100} +$	35 100	= ÷	$\frac{20}{20}$	=		(j)	$\frac{15}{25}$ +	$\frac{5}{25} = _$ $\div \frac{5}{5} = _$

(2) What fraction has to be added ?

(-)				
(a)	$\frac{3}{8}$ + = $\frac{7}{8}$	(b)	$\frac{3}{6}$ + _ = $\frac{6}{6}$	(c) $\frac{2}{10} + \underline{\qquad} = \frac{8}{10}$
(d)	$\frac{3}{15}$ + _ = $\frac{12}{15}$	(e)	$\frac{2}{5}$ + = 1	*(f) $\frac{2}{5} + $ = 2
(g)	$\frac{2}{10}$ + _ = $\frac{9}{10}$	(h)	$\frac{5}{8}$ + _ = 1	*(i) $\frac{4}{6} + = 2$
(j)	$\frac{8}{20}$ + _ = $\frac{16}{20}$	(k)	$\frac{4}{10}$ + = 1	*(I) <u>1</u> + = 2
(m)	$\frac{7}{8}$ + _ = 1	(n)	$\frac{4}{7}$ + = $\frac{6}{7}$	*(o) <u>1</u> + = 4

(3) Add the whole numbers and the fractions.

(a)	1	+	$1\frac{1}{3}$	=	(b)	$1\frac{1}{4}$	+ $1\frac{1}{4}$	=	
(c)	$4\frac{1}{5}$	+	$1\frac{3}{5}$	=	(d)	$4\frac{3}{6}$	+ $1\frac{3}{6}$	=	
(e)	$4\frac{1}{3}$	+	$1\frac{1}{3}$	=	(f)	$1\frac{2}{8}$	+ $1\frac{1}{8}$	=	
(g)	$2\frac{3}{8}$	+	$1\frac{1}{8}$	=			$+ 1\frac{3}{6}$		

DIVISION WITH A REMAINDER (Speed test) (2x-12x)

Exercise B1I:	Date:	
Write down the answer.		
(a) 24 ÷ 5 =	(a) 39 ÷ 8 =	
(b) 36 ÷ 8 =	(b) 44 ÷ 6 =	
(c) 72 ÷ 9 =	(c) 29 ÷ 7 =	
(d) 38 ÷ 7 =	(d) 35 ÷ 8 =	
(e) 49 ÷ 6 =	(e) 30 ÷ 9 =	
(f) 62 ÷ 5 =	(f) 19 ÷ 4 =	
(g) 63 ÷ 4 =	(g) 61 ÷ 2 =	
(h) 58 ÷ 7 =	(h) 33 ÷ 2 =	
(i) 66 ÷ 8 =	(i) 75 ÷ 6 =	
(j) 85 ÷ 9 =	(j) 46 ÷ 5 _=	
Total:	Total:	
Total out of 20:		