

Grade 6 – Book B

Workbook

(Revised CAPS edition)

Revised for 2023

CONTENT:

	<u>Page</u>
B1. Fractions	3
B2. Decimal Fractions	47
B3. Number patterns	81
B4. Time	101

Visit www.abcmathsandscience.co.za for free downloadable worksheet and much more!

This book was compiled and processed by E. Language in 2012 in collaboration with E.J. Du Toit.

E-mail address: info@abcbooks.co.za

Copyright © 2012. All copyrights reserved. No part of this publication may be reproduced in any form; unless written consent was obtained.

ISBN 978-1-920505-11-0

Chapter B1 Fractions

B1.1 Basic fractions:

Exercise 1:

Date: _____

(1) Answer the questions.

2 5 31 45 32 33

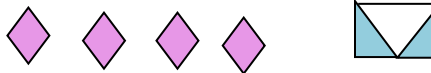
- (a) Which fraction of the numbers in the block is even numbers? _____
- (b) Which fraction of the numbers in the block isn't even numbers? _____
- (c) Which fraction of the numbers in the block has a '3' in the number? _____
- (d) Which fraction of the numbers in the block has a '2' in the number? _____
- (e) How many elements in the block are natural numbers? _____

(2) Which fraction of the diagrams is shaded and which fraction is not shaded?



Fractions shaded: _____

Fractions not shaded: _____



Fractions shaded: _____

Fractions not shaded: _____

(3) Use the table to arrange the fractions in ascending order.

1 whole							
$\frac{1}{2}$				$\frac{1}{2}$			
$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$		4	
$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$

$\frac{1}{2}; \frac{1}{4}; \frac{2}{2}; \frac{1}{8}$	→
$\frac{3}{4}; \frac{1}{4}; \frac{7}{4}; \frac{1}{1}$	→
$\frac{4}{4}; \frac{1}{2}; \frac{1}{4}; \frac{3}{4}$	→

Proper fraction: Numerator less than the denominator $\frac{1}{4}$ The fraction is less than 1 ..	Improper fraction: Numerator greater than the denominator $\frac{6}{4}$ The fraction is greater than 1
Mixed numbers: A number written as a combination of an <u>integer</u> and a proper <u>fraction</u> . $3\frac{1}{4}$	
To convert improper fractions to mixed numbers is the same as division:	
$\frac{9}{4} = 2 \text{ r } 1 \text{ therefore: } \frac{9}{4} = 2\frac{1}{4}$	

Exercise 2:

Date : _____

(1) Convert the improper fractions to mixed numbers:

(1) $\frac{7}{4} =$	(2) $\frac{9}{2} =$	(3) $\frac{18}{5} =$	(4) $\frac{27}{4} =$
(5) $\frac{33}{4} =$	(6) $\frac{25}{6} =$	(7) $\frac{47}{6} =$	(8) $\frac{40}{7} =$
(9) $\frac{69}{8} =$	(10) $\frac{50}{8} =$	(11) $\frac{20}{9} =$	(12) $\frac{147}{12} =$
(13) $\frac{16}{5} =$	(14) $\frac{13}{2} =$	(15) $\frac{17}{4} =$	(16) $\frac{19}{3} =$
(17) $\frac{39}{6} =$	(18) $\frac{45}{7} =$	(19) $\frac{29}{2} =$	(20) $\frac{100}{9} =$
(21) $\frac{32}{15} =$	(22) $\frac{30}{25} =$	(23) $\frac{81}{20} =$	(24) $\frac{112}{10} =$
(25) $\frac{50}{12} =$	(26) $\frac{65}{20} =$	(27) $\frac{78}{11} =$	(28) $\frac{32}{15} =$
(29) $\frac{66}{15} =$	(30) $\frac{56}{5} =$	(31) $\frac{37}{4} =$	(32) $\frac{21}{2} =$
(33) $\frac{110}{25} =$	(34) $\frac{38}{5} =$	(35) $\frac{25}{3} =$	(36) $\frac{50}{4} =$
(37) $\frac{105}{25} =$	(38) $\frac{38}{4} =$	(39) $\frac{105}{20} =$	(40) $\frac{46}{15} =$

Exercise 3:

Date: _____



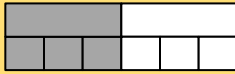
$$2 \frac{1}{4} = \frac{9}{4} \quad (2 \times 4 + 1 = 9)$$

(1) Convert the mixed numbers to improper fractions:

(1) $1 \frac{1}{2} =$	(2) $1 \frac{1}{3} =$	(3) $1 \frac{1}{4} =$	(4) $1 \frac{1}{5} =$
(5) $3 \frac{1}{3} =$	(6) $2 \frac{2}{3} =$	(7) $2 \frac{3}{5} =$	(8) $1 \frac{1}{9} =$
(9) $2 \frac{3}{4} =$	(10) $2 \frac{1}{9} =$	(11) $3 \frac{1}{3} =$	(12) $3 \frac{1}{8} =$
(13) $1 \frac{1}{6} =$	(14) $2 \frac{3}{7} =$	(15) $25 \frac{1}{4} =$	(16) $1 \frac{1}{8} =$
(17) $1 \frac{2}{10} =$	(18) $1 \frac{2}{6} =$	(19) $1 \frac{3}{5} =$	(20) $1 \frac{3}{4} =$
(21) $5 \frac{1}{6} =$	(22) $4 \frac{3}{8} =$	(23) $9 \frac{3}{4} =$	(24) $45 \frac{1}{2} =$
(25) $3 \frac{4}{6} =$	(26) $9 \frac{1}{5} =$	(27) $6 \frac{3}{4} =$	(28) $8 \frac{1}{8} =$
(29) $5 \frac{3}{7} =$	(30) $8 \frac{3}{5} =$	(31) $11 \frac{3}{4} =$	(32) $12 \frac{1}{7} =$
(33) $7 \frac{1}{8} =$	(34) $4 \frac{1}{8} =$	(35) $9 \frac{1}{2} =$	(36) $5 \frac{1}{3} =$
(37) $4 \frac{1}{5} =$	(38) $6 \frac{3}{8} =$	(39) $7 \frac{3}{4} =$	(40) $9 \frac{1}{8} =$
(41) $2 \frac{1}{15} =$	(42) $6 \frac{2}{9} =$	(43) $9 \frac{2}{7} =$	(44) $25 \frac{1}{3} =$
(45) $15 \frac{1}{4} =$	(46) $10 \frac{3}{8} =$	(47) $8 \frac{3}{12} =$	(48) $35 \frac{1}{2} =$
(49) $2 \frac{1}{5} =$	(50) $11 \frac{3}{12} =$	(51) $12 \frac{2}{8} =$	(52) $6 \frac{3}{8} =$
(53) $3 \frac{1}{9} =$	(54) $6 \frac{3}{6} =$	(55) $2 \frac{7}{8} =$	(56) $8 \frac{7}{8} =$

B1.3 Equivalent fractions:**Exercise 4:**

Date: _____

EQUIVALENT FRACTIONS

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

**REMEMBER
THE GOLDEN
RULE!**

(1) Write the equivalent fractions:

GOLDEN RULE: Whatever you do to the numerator must be applied to the denominator as well.

$$(a) \quad \frac{1}{4} \times \frac{3}{3} = \frac{\quad}{12} \quad (b) \quad \frac{1}{4} \times \frac{\quad}{4} = \frac{\quad}{16} \quad (c) \quad \frac{1}{3} \times \frac{\quad}{3} = \frac{\quad}{9}$$

$$(d) \quad \frac{4}{8} \times \frac{\quad}{\quad} = \frac{\quad}{32} \quad (e) \quad \frac{4}{7} \times \frac{\quad}{\quad} = \frac{\quad}{35} \quad (f) \quad \frac{3}{4} \times \frac{\quad}{\quad} = \frac{\quad}{20}$$

$$(g) \quad \frac{3}{6} \times \frac{\quad}{\quad} = \frac{12}{\quad} \quad (h) \quad \frac{5}{8} \times \frac{\quad}{\quad} = \frac{25}{\quad} \quad (i) \quad \frac{3}{9} \times \frac{\quad}{\quad} = \frac{\quad}{3}$$

$$(j) \quad \frac{4}{7} \times \frac{\quad}{\quad} = \frac{36}{\quad} \quad (k) \quad \frac{3}{6} \times \frac{\quad}{\quad} = \frac{21}{\quad} \quad (l) \quad \frac{2}{3} \times \frac{\quad}{\quad} = \frac{\quad}{60}$$

$$(m) \quad \frac{4}{9} \times \frac{\quad}{\quad} = \frac{\quad}{90} \quad (n) \quad \frac{2}{9} \times \frac{\quad}{\quad} = \frac{\quad}{81} \quad (o) \quad \frac{1}{5} \times \frac{\quad}{\quad} = \frac{\quad}{70}$$

(2) Write the following as improper fractions and complete the equivalent fractions.

$$(a) \quad 2\frac{1}{3} = \frac{7}{3} \times \frac{\quad}{\quad} = \frac{\quad}{12} \quad (b) \quad 4\frac{1}{2} = \frac{\quad}{\quad} \times \frac{3}{3} = \frac{\quad}{\quad} \quad (c) \quad 1\frac{1}{3} = \frac{\quad}{3} \times \frac{\quad}{\quad} = \frac{\quad}{21}$$

$$(d) \quad 3\frac{1}{2} = \frac{\quad}{\quad} \times \frac{7}{7} = \frac{\quad}{14} \quad (e) \quad 7\frac{2}{4} = \frac{\quad}{4} \times \frac{3}{3} = \frac{\quad}{\quad} \quad (f) \quad 6\frac{4}{6} = \frac{\quad}{6} \times \frac{\quad}{\quad} = \frac{\quad}{18}$$

$$(g) \quad 3\frac{3}{4} = \frac{\quad}{4} \times \frac{4}{4} = \frac{\quad}{16} \quad (h) \quad 3\frac{1}{5} = \frac{\quad}{5} \times \frac{2}{2} = \frac{\quad}{\quad} \quad (i) \quad 8\frac{1}{5} = \frac{\quad}{5} \times \frac{\quad}{\quad} = \frac{\quad}{10}$$

$$(j) \quad 3\frac{2}{3} = \frac{\quad}{3} \times \frac{7}{7} = \frac{\quad}{21} \quad (k) \quad 3\frac{3}{4} = \frac{\quad}{4} \times \frac{3}{3} = \frac{\quad}{12} \quad (l) \quad 6\frac{2}{3} = \frac{\quad}{3} \times \frac{\quad}{\quad} = \frac{\quad}{15}$$

$$(m) \quad 6\frac{3}{7} = \frac{\quad}{7} \times \frac{2}{2} = \frac{\quad}{14} \quad (n) \quad 6\frac{1}{4} = \frac{\quad}{4} \times \frac{3}{3} = \frac{\quad}{\quad} \quad (o) \quad 2\frac{7}{9} = \frac{\quad}{9} \times \frac{\quad}{3} = \frac{\quad}{\quad}$$

MULTIPLES OF LARGE NUMBERS

Exercise B1D:

Date: _____

(1) Write down the first ten multiples of the following numbers:

15	
35	
25	
45	
125	

(2) Write down the answers.

(a) $3 \times 15 =$ _____

(a) $5 \times 25 =$ _____

(a) $4 \times 35 =$ _____

(a) $6 \times 45 =$ _____

(b) $9 \times 20 =$ _____

(b) $5 \times 15 =$ _____

(b) $3 \times 35 =$ _____

(b) $2 \times 45 =$ _____

(c) $6 \times 15 =$ _____

(c) $3 \times 125 =$ _____

(c) $4 \times 25 =$ _____

(c) $10 \times 15 =$ _____

(d) $3 \times 35 =$ _____

(d) $6 \times 25 =$ _____

(d) $6 \times 15 =$ _____

(d) $8 \times 15 =$ _____

(e) $5 \times 20 =$ _____

(e) $8 \times 25 =$ _____

(e) $8 \times 125 =$ _____

(e) $4 \times 125 =$ _____

(f) $10 \times 15 =$ _____

(f) $6 \times 15 =$ _____

(f) $2 \times 125 =$ _____

(f) $9 \times 15 =$ _____

(g) $3 \times 25 =$ _____

(g) $6 \times 25 =$ _____

(g) $2 \times 500 =$ _____

(g) $1 \times 125 =$ _____

(h) $0 \times 25 =$ _____

(h) $10 \times 125 =$ _____

(h) $8 \times 35 =$ _____

(h) $20 \times 20 =$ _____

(i) $8 \times 25 =$ _____

(i) $6 \times 20 =$ _____

(i) $0 \times 25 =$ _____

(i) $*25 \times 25 =$ _____

(j) $*15 \times 15 =$ _____

(j) $20 \times 35 =$ _____

(j) $30 \times 15 =$ _____

(j) $*16 \times 125 =$ _____

Total:

Total:

Total:

Total:

Total out of 40:

B1.4 Simplifying of fractions:**Exercise 5:**

Date: _____

SIMPLIFY THE FRACTIONS**HCF(GCF) of 28 and 32 is 4**

$$\frac{28}{32} = \frac{y}{8} \quad \frac{28}{32} \div \frac{4}{4} = \frac{7}{8} \quad \text{therefore } y = 7$$

(1) Calculate the value of the unknown.**SECRET:** Find the HCF (GCF) of the numerator and the denominator and then simplify the fraction.**Show your work!**

<p>(1) $\frac{8}{16} = \frac{x}{4}$ GCF = 4</p> <p>$\therefore \frac{8}{16} \div \frac{4}{4} = \frac{x}{4}$</p> <p>Therefore $x = \underline{\hspace{2cm}}$</p>	<p>(2) $\frac{9}{30} = \frac{y}{10}$ GCF = _____</p> <p>\therefore</p> <p>Therefore $y = \underline{\hspace{2cm}}$</p>	<p>(3) $\frac{16}{40} = \frac{x}{5}$ GCF = _____</p> <p>\therefore</p> <p>Therefore $x = \underline{\hspace{2cm}}$</p>
<p>(4) $\frac{15}{35} = \frac{m}{7}$ GCF = _____</p> <p>\therefore</p> <p>Therefore $m = \underline{\hspace{2cm}}$</p>	<p>(5) $\frac{36}{48} = \frac{n}{4}$ GCF = _____</p> <p>\therefore</p> <p>Therefore $n = \underline{\hspace{2cm}}$</p>	<p>(6) $\frac{18}{81} = \frac{c}{9}$ GCF = _____</p> <p>\therefore</p> <p>Therefore $c = \underline{\hspace{2cm}}$</p>
<p>(7) $\frac{3}{18} = \frac{1}{x}$ GCF = _____</p> <p>\therefore</p> <p>Therefore $x = \underline{\hspace{2cm}}$</p>	<p>(8) $\frac{20}{45} = \frac{4}{m}$ GCF = _____</p> <p>\therefore</p> <p>Therefore $m = \underline{\hspace{2cm}}$</p>	<p>(9) $\frac{25}{125} = \frac{1}{k}$ GCF = _____</p> <p>\therefore</p> <p>Therefore $k = \underline{\hspace{2cm}}$</p>
<p>(10) $\frac{24}{64} = \frac{x}{8}$ GCF = _____</p> <p>\therefore</p> <p>Therefore $x = \underline{\hspace{2cm}}$</p>	<p>(11) $\frac{50}{90} = \frac{5}{m}$ GCF = _____</p> <p>\therefore</p> <p>Therefore $m = \underline{\hspace{2cm}}$</p>	<p>(12) $\frac{21}{28} = \frac{3}{k}$ GCF = _____</p> <p>\therefore</p> <p>Therefore $k = \underline{\hspace{2cm}}$</p>

MULTIPLES (Large numbers)

Exercise B1E:

Date: _____

Write down the answers.

$$\begin{array}{r} \text{(a)} \quad 25 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(b)} \quad 45 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(c)} \quad 25 \\ \times 16 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(d)} \quad 25 \\ \times 12 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(e)} \quad 150 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(f)} \quad 45 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(g)} \quad 25 \\ \times 30 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(h)} \quad 35 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(i)} \quad 250 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(j)} \quad 15 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(k)} \quad 50 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(l)} \quad 15 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(m)} \quad 200 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(n)} \quad 35 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(o)} \quad 125 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(p)} \quad 125 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(q)} \quad 28 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(r)} \quad 15 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(s)} \quad 25 \\ \times 0 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(t)} \quad 11 \\ \times 15 \\ \hline \end{array}$$

Total out of 20:

MULTIPLY BY '11'.

To multiply by '11': $\overset{\curvearrowright}{2}3 \times 11 = 253$ ($2+3=5$ add the two numbers to get the middle number.)

Encircle the multiples of 11.

297	392	231	374	197	198	385	111	495	484
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Study the following. There are more sums on page 104.

$$253 \times 11 = 2783$$

$$117 \times 11 = 1287$$

Use a calculator to check the answers.

(13) $\frac{14}{21} = \frac{c}{3}$ GCF = _____	(14) $\frac{12}{15} = \frac{c}{5}$ GCF = _____	(15) $\frac{8}{12} = \frac{c}{3}$ GCF = _____
Therefore $c =$ _____	Therefore $c =$ _____	Therefore $c =$ _____

B1.5 Operations with fractions:**B1.5.1 Order of fractions:**

LCM = Lowest Common Multiple

$\frac{1}{4}$ and $\frac{2}{3}$ LCM = 12 $\frac{1}{4} \times \frac{3}{3} = \frac{3}{12}$ and $\frac{2}{3} \times \frac{4}{4} = \frac{8}{12}$ therefore is \longrightarrow	Multiples of: 4: 4; 8; 12 ; 16 ... 3: 3; 6; 9; 12 ; 15 ...
$\frac{1}{4} < \frac{2}{3}$	

Exercise 6:

Date: _____

Determine the common denominators and do the sums. Fill in $<$, $>$ or $=$:

(1) $\frac{2}{5}$ and $\frac{1}{2}$ LCM = 10 $\frac{2}{5} \times \frac{2}{2} \square \frac{1}{2} \times \frac{5}{5}$ $\frac{4}{10} < \frac{5}{10} \left(\frac{2}{5} < \frac{1}{2} \right)$	(2) $\frac{1}{4}$ and $\frac{2}{16}$ LCM = _____ _____ _____	(3) $\frac{4}{6}$ and $\frac{1}{3}$ LCM = _____ _____ _____
(4) $\frac{3}{8}$ and $\frac{3}{4}$ LCM = _____ _____ _____	(5) $\frac{1}{6}$ and $\frac{3}{5}$ LCM = _____ _____ _____	(6) $\frac{1}{2}$ and $\frac{2}{4}$ LCM = _____ _____ _____

DIVISION

Exercise B1F:

Date: _____

Write the answers in the blocks underneath.

(1) How many times can the number be divided by two?

116	248	400	164	1 100	158	500	356	650

(2) How many times can the number be divided by eleven?

363	297	121	352	671	374	363	792	*1089

(3) How many times can the number be divided by fifteen?

30	90	150	60	45	105	180	1 500	15 000

(4)) How many times can the number be divided by twenty five?

75	50	100	200	275	150	500	1 000	10 000

Total out of 36:

(7) $\frac{1}{3}$ and $\frac{2}{6}$

LCM = _____

(8) $\frac{4}{7}$ and $\frac{1}{3}$

LCM = _____

(9) $\frac{2}{4}$ and $\frac{5}{6}$

LCM = _____

(10) $\frac{4}{6}$ and $\frac{5}{7}$

LCM = _____

(11) $\frac{2}{5}$ and $\frac{1}{2}$

LCM = _____

(12) $\frac{2}{5}$ and $\frac{3}{6}$

LCM = _____

(13) $\frac{3}{4}$ and $\frac{2}{6}$

LCM = _____

(14) $\frac{2}{7}$ and $\frac{1}{5}$

LCM = _____

(15) $\frac{2}{45}$ and $\frac{3}{15}$

LCM = _____

(16) $\frac{7}{16}$ and $\frac{3}{4}$

LCM = _____

(17) $\frac{3}{5}$ and $\frac{1}{4}$

LCM = _____

(18) $\frac{7}{10}$ and $\frac{2}{4}$

LCM = _____

(19) $\frac{2}{8}$ and $\frac{3}{6}$

LCM = _____

(20) $\frac{3}{15}$ and $\frac{2}{4}$

LCM = _____

(21) $\frac{5}{35}$ and $\frac{10}{70}$

LCM = _____

B1.5.2 Addition of fractions:**Exercise 7:**

Date: _____

$$\frac{2}{3} + \frac{4}{6}$$

$$= \frac{2}{3} \times \frac{2}{2} + \frac{4}{6}$$

$$= \frac{4}{6} + \frac{4}{6} \text{ or } \frac{4+4}{6}$$

$$= \frac{8}{6} \text{ (Simplify)}$$

$$= 1\frac{2}{6} \text{ (Simplify)}$$

$$= 1\frac{1}{3}$$

(1) $\frac{2}{4} + \frac{1}{8}$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

(2) $\frac{1}{5} + \frac{3}{10}$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}} \text{ (Simplify)}$$

(3) $\frac{10}{15} + \frac{2}{5}$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}} \text{ (Simplify)}$$

(4) $\frac{1}{4} + \frac{3}{8}$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

(5) $\frac{2}{6} + \frac{1}{3}$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}} \text{ (Simplify)}$$

(6) $\frac{2}{3} + \frac{4}{9}$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}} \text{ (Simplify)}$$

(7) $\frac{9}{12} + \frac{3}{4}$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}} \text{ (Simplify)}$$

(8) $\frac{7}{15} + \frac{4}{5}$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}} \text{ (Simplify)}$$

(9) $\frac{12}{25} + \frac{3}{15}$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}} \text{ (Simplify)}$$

(10) $\frac{15}{30} + \frac{6}{15}$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}} \text{ (Simplify)}$$

(11) $\frac{15}{30} + \frac{9}{10}$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}} \text{ (Simplify)}$$

(12) $\frac{9}{15} + \frac{1}{5}$

=

=

=

(13) $\frac{4}{8} + \frac{3}{16}$

=

=

=

(14) $\frac{4}{12} + \frac{2}{4}$

=

=

=

An athlete ran a $\frac{1}{4}$ of a marathon on a Monday and $\frac{3}{8}$ on a Tuesday.

(a) What fraction of the marathon did he complete?

(b) What fraction of the marathon must still be completed?

Start with the number sentence:

(a)

(b)

Remember:

$$\frac{8}{8} = 1 \text{ marathon}$$

Exercise 8:

Date: _____

MORE ADDITION!

Add the fractions. Simplify where possible.

$$\frac{1}{3} + \frac{1}{5}$$

$$= \frac{1}{3} \times \frac{5}{5} + \frac{1}{5} \times \frac{3}{3}$$

$$= \frac{5}{15} + \frac{3}{15} \quad \text{or} \quad \frac{5+3}{15}$$

$$= \frac{8}{15}$$

(1) $\frac{2}{3} + \frac{3}{4}$

=

=

=

(2) $\frac{3}{7} + \frac{4}{5}$

=

=

=

