S2 Block Test 1
Revision Booklet
MP3

Special Numbers

Exercise 1 — Multiples & Lowest Common Multiples (l.c.m.)

1. a Write down all the multiples of **4** between **30** and **50**.
   b Write down all the multiples of **7** between **30** and **65**.

2. a List the first ten multiples of **3** and the first 10 multiples of **4**.
   b List the **common multiples** of 3 and 4.
   c What is the **l.c.m.** of 3 and 4 ?

3. Find the l.c.m. of each of the following pairs of numbers :-

a	2 and 3	b	8 and 6	c	3 and 7	d	5 and 8
e	10 and 12	f	3 and 11	g	8 and 9	h	6 and 9.

4. Find the l.c.m. of :- a 2, 3 and 4 b 3, 5 and 9 c 2, 7 and 9.

5. 3 disco lights are set off at the same time and then flash at different intervals :-
   - the blue light flashes every 5 seconds.
   - the green light flashes every 6 seconds.
   - the red light flashes every 8 seconds.

   After they flash at the start, how long will it be until they flash together again ?

Exercise 2 — Factors & Highest Common Factor (h.c.f.)

1. Find all the factors of :-

a	10	b	18	c	23
d	24	e	72	f	100.

2. a List **all** the factors of 18 and all the factors of 24.
   b Make a list of the common factors of 18 and 24. (those that appear in both lists).
   c What is the **highest common factor** (or **h.c.f.**) of 18 and 24.

3. Find the highest common factor (h.c.f.) for each of the following :-

a	12 and 15	b	28 and 35	c	24 and 96
d	37 and 41	e	100 and 105	f	199 and 200.

4. Find the h.c.f. of :- a 12, 15, 21 b 24, 36, 40.

5. Write down all the factors of 360.

Special Numbers

Exercise 3 Prime Numbers

1. a Write all the factors of 15. Why is 15 **not** a prime number ?
   b Explain why the number **1** is **not** a prime number.
   c Explain why 13 **is** a prime number.

2. State whether each number below is a **prime** number or not. (Write **yes** or **no**) :-

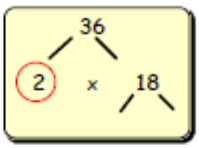
a 5	b 16	c 15	d 17
e 23	f 27	g 29	h 35
i 44	j 47	k 51	l 62.

3. How many **even** numbers are **prime** ?

4. Write down all the prime numbers between 50 and 60.

Exercise 4 Prime Decomposition

1. Copy and complete the prime factor tree shown.



36 = 2 x ... x ...

2. Use a similar method to find the prime decomposition of the following numbers :-

a 12	b 50	c 27	d 80
e 56	f 88	g 35	h 110
i 155	j 345	k 1000	l 256.

Revisit – Review – Revise 3

1. Write down the **lowest common multiple** (l.c.m.) of :-

a 4 and 9	b 12 and 20	c 11 and 37	d 3, 5 and 6.

2. Write down the **highest common factor** (h.c.f.) of :-

a 20 and 28	b 110 and 85	c 21, 49 and 84.

Answers

Chapter 3 : Multiples & Factors

Review 2 Rounding & Whole Numbers

1. a 7·7 b 17·7
   c 119·1 d 1544·0
2. (i) a 7·65 b 17·65
   c 119·08 d 1544·00
   (ii) a 8 b 20
   c 100 d 2000
   (iii) a 7·7 b 18
   c 120 d 1500
   (iv) a 7·65 b 17·7
   c 119 d 1540
3. 25499
4. a 1290 b 60800 c 3256000
   d 170 e 50 f 92
   g 4 h 38 i 20·5
5. 2016, 2020
6. €409·08
7. a 61 b 250 ml
8. €3·90

Ch 3 Ex 1 Multiples & l.c.m.

1. a 32, 36, 40, 44, 48
   b 35, 42, 49, 56, 63
2. a 3, 6, 9, 12, 15, 18, 21, 24, 27, 30
   4, 8, 12, 16, 20, 24, 28, 32, 36, 40
   b 12, 24, 36, ...
   c 12
3. a 6 b 24 c 21
   d 40 e 60 f 33
   g 72 h 18
4. a 12 b 45 c 126
5. 120 seconds

Ch 3 Ex 2 Factors & h.c.f.

1. a 1, 2, 5, 10 b 1, 2, 3, 6, 9, 18 c 1, 23
   d 1, 2, 3, 4, 6, 8, 12, 24
   e 1, 2, 3, 4, 6, 8, 9, 12, 18, 24, 36, 72
   f 1, 2, 4, 5, 10, 20, 25, 50, 100
2. a (i) 1, 2, 3, 6, 9, 18 (ii) see 1d
   b 1, 2, 3, 6 c 6
3. a 3 b 7 c 24
   d 1 e 5 f 1
4. a 3 b 4
5. 1, 2, 3, 4, 6, 8, 9, 10, 12, 15, 18, 20, 24, 30, 40, 45, 60, 90, 120, 180, 360

Ch 3 Ex 3 Prime Numbers

1. a 1, 3, 5, 15 More than 2 factors
   b only 1 factor
   c has exactly 2 factors
2. a yes b no c no
   d yes e yes f no
   g yes h no i no
   j yes k no l no
3. only one (the number 2)
4. 53, 59

Ch 3 Ex 4 Prime Decomposition

1. a $2 \times 2 \times 3 \times 3$
2. a $2 \times 2 \times 3$ b $2 \times 5 \times 5$ c $3 \times 3 \times 3$
   d $2 \times 2 \times 2 \times 2 \times 5$
   e $2 \times 2 \times 2 \times 7$
   f $2 \times 2 \times 2 \times 11$
   g 5×7 h $2 \times 5 \times 11$ i 5×31
   j $3 \times 5 \times 23$ k $2 \times 2 \times 2 \times 5 \times 5$
   l $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$

Ch 3 Revisit – Review – Revise 3

1. a 36 b 60
   c 407 d 30
2. a 4 b 5 c 7
3. 2
4. a 11, 13, 17, 19 b 41, 43, 47 c 97
5. a even b even c divide by 7

Metric Measurement

Exercise 1

1. How many :-
   (a) millimetres in a centimetre ?
   (b) centimetres in a metre ?
   (c) metres in a kilometre ?
   (d) millimetres in a metre ?
   (e) centimetres in a kilometre ?
   (f) millimetres in a kilometre ?

2. Change :-
   (a) 5 cm to mm
   (b) 8 mm to cm
   (c) 15 km to m
   (d) 10 m to cm
   (e) 15 km to m
   (f) 5·5 cm to mm
   (g) 8·6 m to cm
   (h) 15·1 cm to mm
   (i) 10·05 cm to mm
   (j) 7·5 km to m
   (k) 0·1 m to mm
   (l) 0·001 km to mm
   (m) Look at the sign above. How many kilometers to Glasgow ?

3. Change :-
   (a) 400 cm to m
   (b) 3000 m to km
   (c) 80 000 cm to km
   (d) 5000 mm to m
   (e) 100 000 mm to m
   (f) 1 million mm to km.

4. Which is the shortest in each of the following :-
   (a) 0·5 km, 300 m or 4000 cm
   (b) 100 000 mm, 5000 m or 10 km
   (c) 0·0001 km, 0·11 m or 10·1 cm
   (d) 1 million m, 100 000 cm or 1 km ?

5. A 6 metre length of wood is cut in **three places** such that all the pieces are of the same length.
   What is the length of each piece in millimetres.

Answers

Chapter 10 Exercise 1

1. a 10 b 100 c 1000
   d 1000 e 100 000 f 1 000 000
2. a 50 mm b 18 mm c 15 000 m
   d 1000 cm e 1500 m f 55 mm
   g 860 cm h 151 mm i 100·5 mm
   j 7500 m k 100 mm l 1000 mm
   m 10 km
3. a 4 m b 3 km c 0·8 km
   d 5 m e 100 m f 1 km
4. a 4000 cm b 100 000 mm c 0·0001 km
   d 1 km
5. 1500 mm

Time

Exercise 1

1. Change the following to 24 hour times :-

(a) 8·30 am	(b) 1·50 pm	(c) 4·20 pm	(d) 9·01 pm
(e) 6·10 am	(f) 9·45 pm	(g) 11·12 pm	(h) 12·10 pm
(i) 7·08 pm	(j) 11·59	(k) 11·59 am	(l) midnight
(m) Quarter past nine at night		(n) Half past two in the afternoon	
(o) Quarter to six in the evening		(p) Twelve minutes to midnight.	

2. Change the following to 12 hour times :-

(a) 0440	(b) 1610	(c) 2205	(d) 1910
(e) 1130	(f) 0010	(g) 1255	(h) 1010
(i) 1706	(j) 0101	(k) 2010	(l) 0000

Exercise 2

1. How long is it from :-

(a) 3·05 pm to 5·20 pm	(b) 5·15 am to 8·55 am	(c) 6·30 pm to 8·05 pm
(c) 9·50 pm to 11·15 pm	(d) 1430 to 1945	(e) 0950 to 1605
(f) 1442 to 2020	(g) Quarter to six in the morning until five past nine at night.	

2. Kay is not sure which video to watch.

   (a) If she starts to watch one of the videos at 8·35 pm, list the finishing time of each video.

   (b) Kay decides to watch all three videos. What time would the last video finish ?

A	B	C
2 hrs 40 mins	1 hr 25 mins	2 hrs 55 mins

3. New york is 5 hours behind our time (ie Glasgow time 6 pm → New York time 1 pm).

   An aeroplane leaves Glasgow for New York at 1·45 pm with a flight time of 6 hours 35 mins.

   What is the time in New York when the plane lands ?

Time

Exercise 3

1. Round the following times to 1 decimal place :-

   (a) 8·16 secs (b) 15·05 secs (c) 20·97 secs (d) 0·709 secs

2. In a Formula 1 trial the following times were recorded;

   Jenson : 54·62 secs, Cooltad : 54·09 secs, Chewmaker : 54·1 secs, Hall : 54·3 secs.

   List the drivers in order, pole position (winner) first.

3. State the times shown in the following stopwatches :-

   (a) 

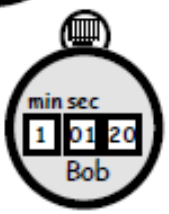
   (b) 

   (c) 

   (d) 

4. Ben and Bob came second and third in a sprint.

   (a) By how much did Ben beat Bob ?

   (b) James beat Bob by 1·5 secs.

   (i) What was James' time

   (ii) By how much did James win the race ?

   (c) Write your answer to (b), (ii) as a fraction in thousandths of a second.

Revision Exercise

1. Write the following in 24 hour time :-

   (a) 9·20 am (b) 4·50 pm (c) 11·05 pm (d) 6·15 pm

2. Write the following in 12 hour time :-

   (a) 0110 (b) 1715 (c) 2310 (d) 0001

3. A train left the station at 1105 and arrived at its destination at 1750. How long was the journey ?

4. A paper round started at 6·25 am and took 1 hour 50 mins. What time did the round finish ?

5. Shown is a train timetable

Glasgow	09 00	11 30	14 16	17 53	
Garrowhill	09 09	11 39	-- --	-- --	-- --
Blairhill	09 12	11 42	-- --	-- --	23 03
Sunnyside	09 14	11 44	-- --	-- --	23 09
Airdrie	09 17	11 47	14 33		23 12

-- -- denotes express train and does not stop at the station.

   (a) How long does it take the first train from Garrowhill to Airdrie ?

   (b) The last train takes 16 minutes from Glasgow to Airdrie. What time does the train leave ?

   (c) What time will the 1753 express from Glasgow arrive at Airdrie ? (Look at the 1416 express)

Answers

Chapter 3 Exercise 1

1. a 0830 b 1350 c 1620 d 2101
   e 0610 f 2145 g 2312 h 1210
   i 1908 j 2359 k 1159 l 0000
   m 2115 n 1430 o 1745 p 2348
2. a 4·40 am b 4·10 pm c 10·05 pm d 7·10 pm
   e 11·30 am f 12·10 am g 12·55 pm h 10·10 am
   i 5·06 pm j 1·01 am k 8·10 pm l midnight

Chapter 3 Exercise 2

1. a 2 hrs 15 mins b 3 hrs 40 mins
   c 1 hr 35 mins d 1 hr 25 mins
   e 5 hrs 15 mins f 6 hrs 15 mins
   g 5 hrs 38 mins h 15 hrs 20 mins
2. a A = 11·15 pm
   B = 10·00 pm
   C = 11·30 pm
   b 3·35 am
3. 3·20 pm

Chapter 3 Exercise 3

1. a 8·2 b 15·1 c 21·0 d 0·7
2. Cooltad, Chewmaker, Hall, Jenson
3. a 5 mins 15·2 secs b 5 mins 1·13 secs
   c 1 hr 15 mins 30·75 secs d 1 hr 1 min 3·4 secs
4. a 1·35 secs
   b (i) 0 min 59·7 secs (ii) 0·25 secs

Chapter 3 Revision Exercise

1. a 0920 b 1650 c 2305 d 1815
2. a 1·10 am b 5·15 pm c 11·10 pm d 12·01 am
3. 6 hrs 45 mins
4. 8·15 am
5. a 8 mins b 2256 c 1810

More Time

Exercise 3 **Converting hrs & mins to Decimal Times**

1. Change the following to decimals of an hour :-

   a 45 minutes **b** 24 minutes **c** 36 minutes **d** 27 minutes.

2. Change the following to decimals of a hour. Give your answer to two decimal places :-

   a 7 minutes **b** 40 minutes **c** 8 minutes **d** 124 minutes.

3. Change each time to decimal form :-

   a 2 hrs 33 mins **b** 1 hr 48 mins **c** 5 hrs 6 mins **d** 3 hrs 3 mins.

4. Calculate the unknown quantity in each of the following :-

   a Distance = ? km Speed = 80 km/hr Time : 2 hrs 45 mins.

   b Distance = 64 miles Speed = ? mph Time : 1 hr 36 mins.

   c Distance = 420 km Speed = 50 km/hr Time : ? hrs ? mins .

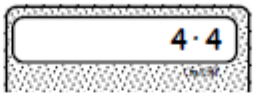
5. The distance between two towns Hurley and Burley is 48 kilometres.
   Gerry drives a truck from Hurley to Burley at a speed of 30 km/hr.
   On the return trip he increases his speed by 6 km/hr.
   How much faster, in minutes and seconds, was the return trip ?

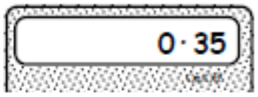
More Time

Exercise 4 **Converting Decimal Times to Hrs & Mins**

1. Change the calculator displays (shown in hours) to hours and minutes :-

   a 

   b 

   c 

2. Change each of the following to hours and minutes :-

   a 4·6 hours b 8·15 hours c 3·05 hours d 1·125 hours.

3. Calculate the time taken in hours and minutes for the following journeys :-

   a A rally car travelling 150 kilometres at 40 km/hr.

   b A marathon runner (26 miles) at a speed of 12 mph.

   c A speed boat at 40 km/hr travelling 36 kilometres.

4. Change each of the following speeds to km/hr :-

   a 20 m/sec b 250 m/sec c 10·5 m/sec d 50 cm/min.

5. In a Marathon race, Dale had a finishing time of 3 hours and 25 mins.
   Alice had a finishing time of 3·4 hours.
   Una completed her race in $3\frac{3}{8}$ hours.

   a Between these three people, who came :-

   (i) first (ii) last ?

   b What was the time difference between :-

   (i) first and second (ii) first and last ?

Answers

Exercise 4 - Convert Dec. Times to Hrs & Mins

1. a 2 hr 48 min b 4 hr 24 min
   c 21 mins
2. a 4 hr 36 min b 8 hr 9 min
   c 3 hr 3 min d 1 hr 7·5 mins
3. a 3 hr 45 min b 2 hr 10 mins
   c 54 mins
4. a 72 km/hr b 900 km/hr
   c 37·8 km/hr d 0·03 km/hr

5. a (i) Una (ii) Dale
   b (i) 1 min (ii) 2 min 30 secs

Exercise 5 - Time, Distance and Speed

1. a 1 hr b 45 km c 1·5 hr
   d (i) 45 km/hr (ii) 60 km/hr
2. a 9 am and 10 am b 55 km
   c Jack by 10 mins
   d 22 km/hr & 36·7 km/hr
   e 12.22 pm

Fractions

Exercise 1 Revision

1. Find two equivalent fractions for each of the following :-

   a $\frac{1}{2}$ b $\frac{1}{3}$ c $\frac{1}{8}$ d $\frac{1}{100}$

   e $\frac{2}{3}$ f $\frac{2}{5}$ g $\frac{3}{7}$ h $\frac{11}{12}$.

2. Simplify fully (where possible) :-

   a $\frac{2}{4}$ b $\frac{6}{9}$ c $\frac{15}{21}$ d $\frac{24}{36}$

   e $\frac{11}{88}$ f $\frac{75}{100}$ g $\frac{17}{51}$ h $\frac{122}{144}$.

3. Write each of the following as fractions and simplify fully :-

   a At first year assembly there were 124 boys out of 240 pupils.

   b At a school fire drill there were 1650 people in the playground.
   There were one hundred and fifty adults.

Exercise 2 Top-Heavy & Mixed Fractions

1. Change each of the following **top heavy fractions** to **mixed numbers** :-

   a $\frac{3}{2}$ b $\frac{11}{2}$ c $\frac{17}{3}$ d $\frac{49}{6}$

   e $\frac{111}{10}$ f $\frac{73}{9}$ g $\frac{204}{5}$ h $\frac{161}{12}$.

2. 51 kg of potatoes are packed evenly into 9 bags.
   What is the weight of each bag ?

3. Change each of these into **mixed numbers** and **simplify** fully where possible :-

   a $\frac{18}{4}$ b $\frac{33}{6}$ c $\frac{145}{10}$ d $\frac{68}{8}$

   e $\frac{122}{4}$ f $\frac{315}{25}$ g $\frac{3333}{6}$ h $\frac{147}{12}$.

4. a How many $\frac{1}{2}$ pizza slices can you get from $5\frac{1}{2}$ pizzas ?

   b How many $\frac{1}{3}$ pizza slices can you get from $7\frac{2}{3}$ pizzas ?

   c How many $\frac{1}{6}$ pizza slices can you get from $4\frac{1}{2}$ pizzas ?

Fractions

5. Change each of the following **mixed numbers** to **top heavy fractions** :-

a $3\frac{1}{6}$ b $6\frac{1}{3}$ c $1\frac{2}{3}$ d $13\frac{4}{5}$

e $8\frac{3}{4}$ f $11\frac{2}{11}$ g $17\frac{3}{7}$ h $81\frac{3}{5}$.

Exercise 3 Adding & Subtracting (basic) Fractions

1. Find and simplify fully where possible :-

a $\frac{1}{2} + \frac{1}{4}$ b $\frac{1}{4} + \frac{1}{4}$ c $\frac{3}{5} + \frac{1}{5}$ d $\frac{7}{11} + \frac{4}{11}$

e $\frac{3}{5} - \frac{1}{5}$ f $\frac{7}{8} - \frac{3}{8}$ g $4\frac{1}{4} + \frac{1}{4}$ h $7\frac{3}{5} + 1\frac{1}{5}$

i $8\frac{3}{8} + 2\frac{1}{8}$ j $9 - 4\frac{1}{4}$ k $7\frac{5}{9} + 2\frac{4}{9}$ l $5\frac{1}{2} - 1\frac{1}{4}$.

2. Two carafes of wine were poured into a punch bowl.

One carafe held $\frac{5}{8}$ a litre of wine and the other held $\frac{1}{8}$ litres.

a How much wine is now in the bowl ?

b How much more wine did the first carafe hold than the second ?

3. A room is $9\frac{3}{4}$ metres long by $6\frac{1}{4}$ metres wide.

a How much **longer** is the length than the breadth ?

b Find the perimeter of the room.

Exercise 4 Adding & Subtracting (harder) Fractions

1. Calculate :-

a $\frac{1}{2} + \frac{1}{4}$ b $\frac{1}{3} + \frac{1}{4}$ c $\frac{3}{5} + \frac{3}{4}$ d $\frac{2}{3} + \frac{3}{8}$

e $\frac{3}{4} - \frac{1}{3}$ f $\frac{7}{8} - \frac{2}{3}$ g $\frac{4}{5} - \frac{2}{7}$ h $\frac{8}{9} + \frac{3}{5}$

i $\frac{1}{12} + \frac{1}{13}$ j $\frac{7}{8} - \frac{9}{11}$ k $\frac{6}{13} + \frac{15}{52}$ l $\frac{5}{6} - \frac{3}{8}$.

2. Find :-

a $5 - 3\frac{1}{2}$ b $12 - 6\frac{1}{14}$ c $6\frac{2}{3} - 1\frac{1}{4}$ d $7\frac{4}{5} - 5\frac{3}{4}$

e $10\frac{7}{8} - 7\frac{2}{3}$ f $81\frac{1}{2} - 77\frac{3}{4}$ g $6\frac{3}{5} - 4\frac{7}{8}$ h $2\frac{1}{2} - 1\frac{7}{9}$.

Fractions

Revisit - Review - Revise Exercise 9

1. Write down **three** equivalent fractions for :-

   a $\frac{1}{3}$ b $\frac{2}{5}$ c $\frac{9}{10}$ d $\frac{11}{17}$.

2. Change each of the following to a top heavy fraction :-

   a $5\frac{1}{2}$ b $4\frac{2}{3}$ c $8\frac{2}{7}$ d $1\frac{9}{11}$.

3. Change each of the following to a mixed number :-

   a $\frac{11}{3}$ b $\frac{20}{7}$ c $\frac{101}{9}$ d $\frac{75}{10}$.

4. Find and simplify fully where possible :-

   a $\frac{1}{2} + \frac{1}{5}$ b $1\frac{1}{3} + 1\frac{1}{2}$ c $3\frac{1}{3} + 2\frac{2}{5}$ d $14 - 6\frac{1}{2}$

   e $4\frac{1}{2} - 2\frac{2}{7}$ f $7\frac{9}{10} - 5\frac{2}{3}$ g $8\frac{1}{4} - 5\frac{2}{3}$ h $9\frac{1}{3} - 5\frac{2}{5}$

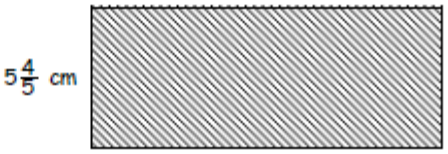
   i $7\frac{1}{5} + 1\frac{2}{3}$ j $11\frac{3}{4} + 8\frac{7}{9}$ k $5\frac{1}{9} - 3\frac{3}{5}$ l $9\frac{5}{6} - 8\frac{13}{18}$.

5. Jamie wanted to run $10\frac{1}{2}$ km during his race practice.
   He only managed to run $8\frac{5}{8}$ km.

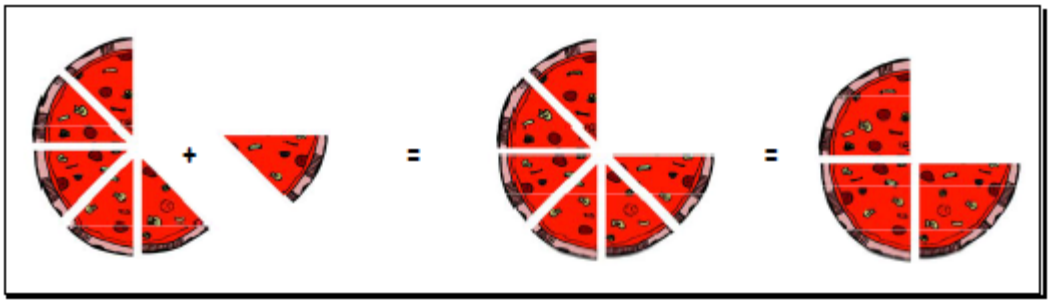
   How far short was he of completing his practice ?

6. a Calculate the perimeter of the rectangle shown.

   b How much longer is the length than the breadth ?



7. Write the sum represented by the diagram below :-



Answers

Answers to Chapter 9

Exercise 1 - Revision

1. a $^{2}/_{4}$, $^{3}/_{6}$ b $^{2}/_{6}$, $^{3}/_{9}$
   c $^{2}/_{16}$, $^{3}/_{24}$ d $^{2}/_{200}$ $^{3}/_{300}$
   e $^{4}/_{6}$, $^{6}/_{9}$ f $^{4}/_{10}$, $^{6}/_{15}$
   g $^{6}/_{14}$, $^{9}/_{21}$ h $^{22}/_{24}$, $^{33}/_{36}$
2. a $^{1}/_{2}$ b $^{2}/_{3}$ c $^{5}/_{7}$ d $^{2}/_{3}$
   d $^{1}/_{8}$ f $^{3}/_{4}$ g $^{1}/_{3}$ h $^{61}/_{72}$
3. a $^{124}/_{240} = {}^{31}/_{60}$ b $^{150}/_{1650} = {}^{1}/_{11}$

Exercise 2 - Top-Heavy and Mixed Fractions

1. a $1^{1}/_{2}$ b $5^{1}/_{2}$ c $5^{2}/_{3}$ d $8^{1}/_{6}$
   e $11^{1}/_{10}$ f $8^{1}/_{9}$ g $40^{4}/_{5}$ h $13^{5}/_{12}$
2. $5^{2}/_{3}$ kg
3. a $4^{1}/_{2}$ b $5^{1}/_{2}$ c $14^{1}/_{2}$ d $8^{1}/_{2}$
   e $30^{1}/_{2}$ f $12^{3}/_{5}$ g $555^{1}/_{2}$ h $12^{1}/_{4}$
4. a 11 b 23 c 27
5. a $^{19}/_{6}$ b $^{19}/_{3}$ c $^{5}/_{3}$ d $^{69}/_{5}$
   e $^{35}/_{4}$ f $^{123}/_{11}$ g $^{122}/_{7}$ h $^{408}/_{5}$

Exercise 3 - Add/Subtract Basic Fractions

1. a $^{3}/_{4}$ b $^{1}/_{2}$ c $^{4}/_{5}$ d 1
   e $^{2}/_{5}$ f $^{1}/_{2}$ g $4^{1}/_{2}$ h $8^{4}/_{5}$
   i $10^{1}/_{2}$ j $4^{3}/_{4}$ k 10 l $4^{1}/_{4}$
2. a $^{3}/_{4}$ litre b $^{1}/_{2}$ litre
3. a $3^{1}/_{2}$ m b 32 m

Exercise 4 - Add/Subtract Harder Fractions

1. a $^{3}/_{4}$ b $^{7}/_{12}$ c $^{17}/_{20}$ d $^{11}/_{24}$
   e $^{5}/_{12}$ f $^{5}/_{24}$ g $^{18}/_{35}$ h $^{122}/_{45}$
   i $^{25}/_{156}$ j $^{5}/_{88}$ k $^{3}/_{4}$ l $^{11}/_{24}$
2. a $1^{1}/_{2}$ b $5^{13}/_{14}$ c $5^{5}/_{12}$ d $2^{1}/_{20}$
   e $3^{5}/_{24}$ f $3^{3}/_{4}$ g $1^{29}/_{40}$ h $^{13}/_{18}$

Review - Revisit - Revise Exercise 9

1. a $^{2}/_{6}$, $^{3}/_{9}$ b $^{4}/_{10}$, $^{6}/_{15}$
   c $^{18}/_{20}$, $^{27}/_{30}$ d $^{22}/_{34}$, $^{33}/_{51}$
2. a $^{11}/_{2}$ b $^{14}/_{3}$ c $^{58}/_{7}$ d $^{20}/_{11}$
3. a $3^{2}/_{3}$ b $2^{6}/_{7}$ c $11^{2}/_{9}$ d $7^{1}/_{2}$
4. a $^{7}/_{10}$ b $2^{5}/_{6}$ c $5^{11}/_{15}$ d $7^{1}/_{2}$
   e $2^{3}/_{14}$ f $2^{7}/_{30}$ g $2^{7}/_{12}$ h $3^{14}/_{15}$
   i $8^{13}/_{15}$ j $20^{19}/_{36}$ k $1^{23}/_{45}$ l $1^{1}/_{9}$
5. $1^{7}/_{8}$ km
6. a $29^{1}/_{10}$ cm b $2^{19}/_{20}$ cm
7. $^{5}/_{8} + {}^{1}/_{8} = {}^{6}/_{8} = {}^{3}/_{4}$