

CoEA Module 3 Case Study 2

Leisure Time

The resources for this Case Study consist of

Teacher Notes	
OHP1	<i>24-hour Time</i>
Worksheet WS1	<i>24-hour Time</i>
Homework Sheets HW1.1-1.2	<i>24-hour Time</i>
Worksheet WS2	<i>TV Timetables (1)</i>
Worksheet WS3	<i>Train Timetable</i>
Resource Sheet CR1	<i>TV Timetables (2)</i>
Worksheet WS4	<i>TV Timetables (2)</i>
Homework Sheet HW2	<i>TV Timetables (3)</i>
Worksheets WS5.1-5.2	<i>Athletics</i>
<i>Awards Scheme</i> Information Sheet 1	
<i>Awards Scheme</i> Information Sheet 2	
<i>Awards Scheme</i> Information Sheet 3	
Resource Sheet CR2	<i>Sports Centre</i>
Worksheets WS6.1-6.2	<i>Sports Centre</i>
Worksheets WS7.1-7.3	<i>Holidays</i>
Worksheet WS8	<i>Coach Journey</i>
Worksheet WS9.1-9.3	<i>Car Hire</i>
Worksheet WS10	<i>Majorca</i>
Worksheet WS11	<i>Trimbago</i>
Test (3 pages)	

Case Study 2

Leisure Time

Teacher Notes

Using OHP1, introduce the 24-hour clock. Follow up with WS1 and HW1.

Discuss the timetable on WS2 with the class, then pupils work through the questions. Use WS3 in the same way.

Using CR1 as an introduction, pupils complete WS4 and then HW2.

Further use of tables is explored on WS5, using *AWARDS INFORMATION SHEETS 1-3*, and then WS6 and CR2.

WS7 involves the use of tables in planning a holiday. WS8 continues the holiday theme.

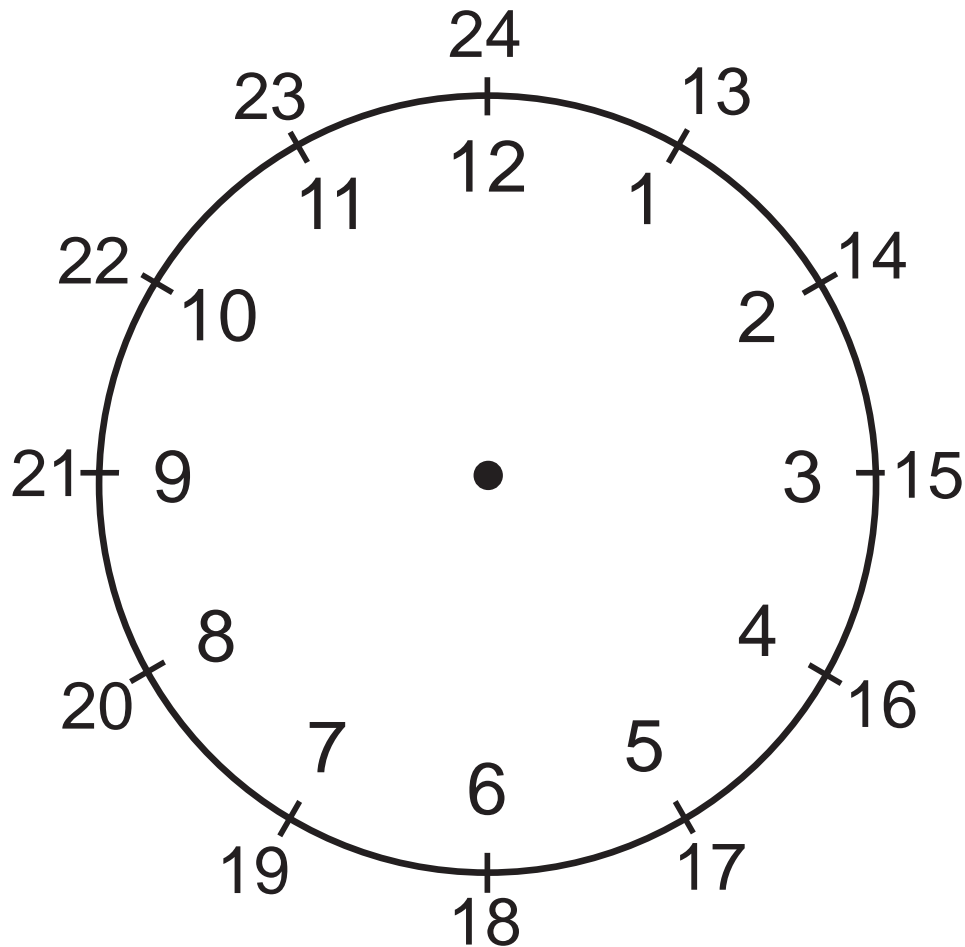
WS9 introduces number/function machines using car hire as the starting point.

WS10 and WS11 introduce coordinates using maps of the holiday islands.

Case Study 2, OHP1

24-hour Time

We often use the 24-hour clock when talking about time. This makes sure that there is no confusion about whether we are referring to morning or afternoon.



On this clock, the hours from 1 o'clock in the morning (0100 hours) until noon (1200 hours) are shown on the *inside* of the clock face and the hours from 1.00 in the afternoon (1300) to midnight (2400) are shown around the *outside*.

So 1 o'clock in the afternoon is 1 pm and also 1300 hours,
 2 o'clock in the afternoon is 2 pm and also 1400 hours
 3 o'clock in the afternoon is 3 pm and also 1500 hours.

Case Study 2, WS1

24-hour Time

Fill in the gaps.

4 pm is the same time as hours

8 am is the same time as hours

7 pm is the same time as hours

5 am is the same time as hours

10 pm is the same time as hours

6 pm is the same time as hours

8.30 pm is the same time as hours

12 noon is the same time as hours

6.45 pm is the same time as hours

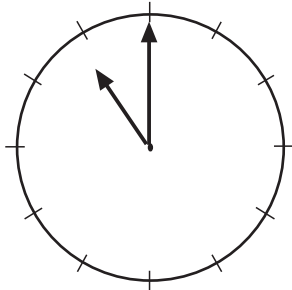
12 midnight is the same time as hours

Case Study 2, HW1.1

24-hour Time

For each clock below, fill in the missing time. Remember to put am or pm.

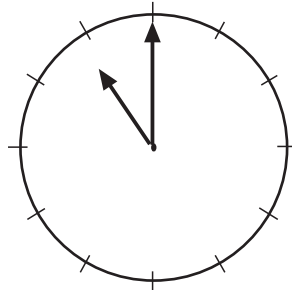
1.



11.00 am

..... hours

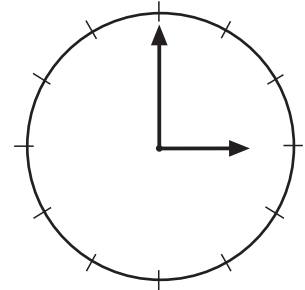
2.



11.00 pm

..... hours

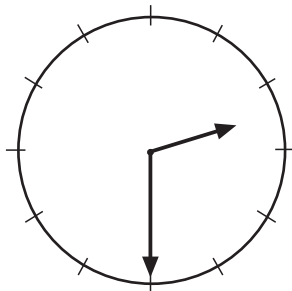
3.



.....

1500 hours

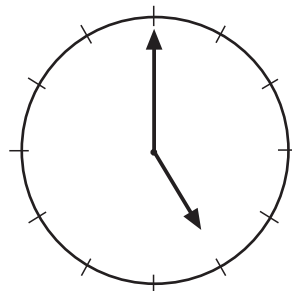
4.



2.30 pm

..... hours

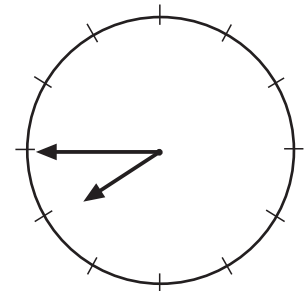
5.



.....

1700 hours

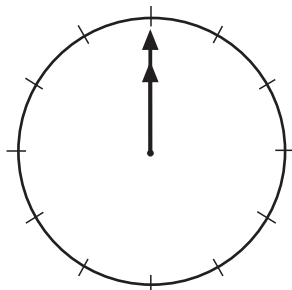
6.



.....

1945 hours

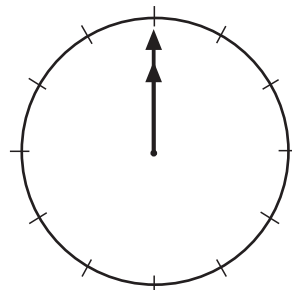
7.



12.00 am

..... hours

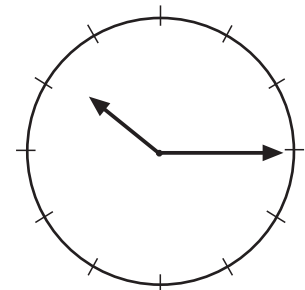
8.



12.00 pm

..... hours

9.



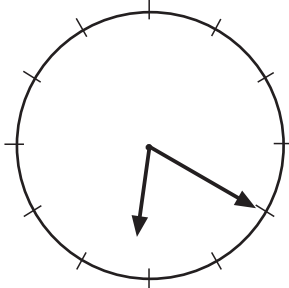
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2215 hours

Case Study 2, HW1.2

24-hour Time

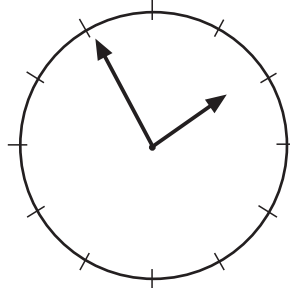
10.



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1820 hours

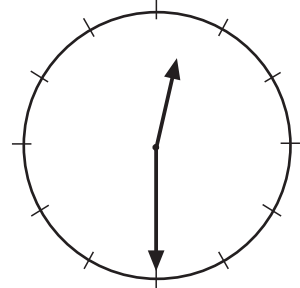
11.



1.56 pm

..... hours

12.

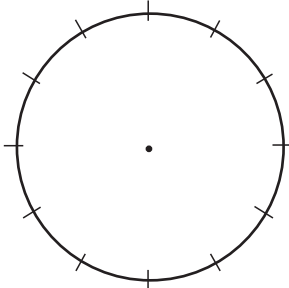


.....

0030 hours

Draw in the hands on these clocks to show the given times. Fill in the missing time under each clock.

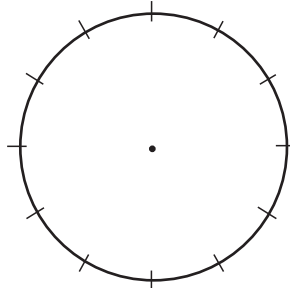
13.



5.15 pm

..... hours

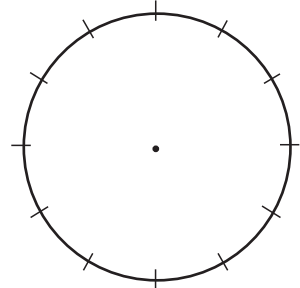
14.



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1830 hours

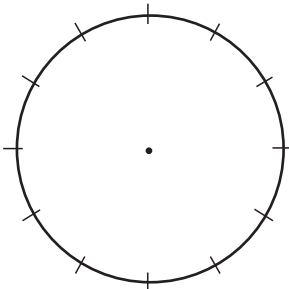
15.



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1245 hours

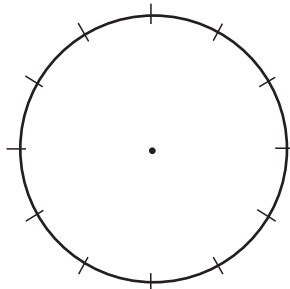
16.



2.00 am

..... hours

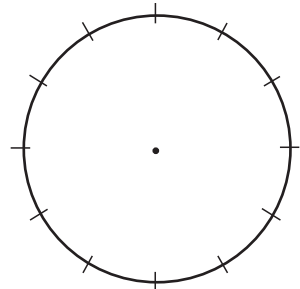
17.



7.15 pm

..... hours

18.



.....

2330 hours

Case Study 2, WS2

TV Timetables (1)

Here are the TV listings for BBC1, BBC2, ITV and C4 on Friday 31 October 1997.

BBC1		BBC2		ITV		C4	
7.00	Breakfast News	7.00	Breakfast News	6.00	GMTV-News Hour	5.55	Sesame Street
9.00	Can't Cook Won't Cook	7.10	Teletubbies	7.00	Ross and Fiona	7.00	The Bigger B'fast
9.25	Style Challenge	7.40	Smurfs Adventures	8.30	Children's Half Term	9.00	Eerie Indiana
9.50	Kilroy	8.05	Smart	9.25	Supermarket Swap	9.30	Tiny Tim
10.30	Change That	8.30	Williams	9.55	ITV News	10.35	Happy Days
10.55	The Really Useful Show	8.35	Wishing	10.00	The Time-The Place	11.05	The Bigger B'fast
11.35	Real Rooms	8.45	The Record	10.30	This Morning	11.15	Pink Panther
12.00	News	9.10	Daytime on Two	12.20	ITV News	11.30	Scripes
12.05	Call My Bluff	10.00	Teletubbies	12.30	News & Weather	12.00	Sesame Street
12.35	Going for a Song	10.30	Daytime on Two	12.55	Moneyspinners	12.30	Light Lunch
		12.30	Working Lunch				

1. At what time is *This Morning* on ITV?
2. What programme is on BBC1 just before *Style Challenge*?
3. Which Channel starts earliest in the morning?
4. For how long does the *News* at 12.00 last on BBC1?
5. For how long does *Supermarket Sweep* last on ITV?
6. Which children's programme is shown twice on BBC2?
7. In total, how long does *Daytime on Two* last?
8. Which programme starts at 10.30 and last for 25 minutes?
9. Which programme starts at 7.00 and last for 90 minutes?

Case Study 2, WS3

Train Timetable

Here is a train timetable between Manchester and Liverpool.

	A	B	C	D
Manchester Piccadilly	1200	1300	1400	1600
Oxford Road	1205	1305	1405	1605
Warrington Central	1225	1325	-	-
St Helens	1240	1340	-	1630
Edge Hill	1250	1350	1445	-
Liverpool Lime Street	1255	1355	1450	1700

1. (a) Is this a timetable for mornings or afternoons?
- (b) How can you tell?
2. At what time does train C leave Manchester Piccadilly station?
3. At what time does train D leave Oxford Road station?
4. At what time does train D arrive at Liverpool Lime Street station?
5. Which train is at Warrington station at 1.25 pm?
6. Where is train A at 12.50 pm?
7. Which train is at Oxford Road station at 2.05 pm?
8. Where is train D at 5.00 pm?
9. If you need to be in Edge Hill by 2.00 pm, what train must you catch?
10. Train E leaves Manchester Piccadilly at 6.30 pm Using the 24-hour clock, write out its journey times to Liverpool – it stops at all stations.

Case Study 2, CR1

TV Timetables (2)

More TV listings for Friday 31 October 1997 are shown here.

BBC1	BBC2	ITV	C4
13.00 News	13.00 The Little Polar Bear	13.25 Home and Away	1.30 To Boldly Go
13.30 Local News	13.05 Pingu	13.50 Murder She Wrote	1.55 Ticket To Tomahawk
13.40 The Weather Show	13.10 Art And Antiques Hunt	14.50 You Can Cook	3.30 Routes Around/World
13.45 Neighbours	14.10 Going Going Gone	15.20 News	4.00 Fifteen To One
14.10 Quincy	14.35 Talent 2000	15.30 Children's ITV	4.30 Countdown
15.00 World On A Plate	14.40 News	17.10 Country Practice	4.55 Ricki Lake
15.30 Children's BBC	14.45 Situations Vacant	17.40 News	5.30 Pet Rescue
17.35 Neighbours	15.25 News	18.00 Home And Away	6.00 TFI Friday
18.00 News	15.30 The Village	18.30 The West Tonight	7.00 News
18.30 Local News	16.00 Ready Steady Cook	19.00 Price Is Right	7.55 Dan Pearson
19.00 Watchdog	16.30 Through The Keyhole	19.30 Coronation Street	8.30 Brookside
19.30 TOTP	16.55 Esther	20.00 The Bill	9.00 Friends
20.00 999 Lifesavers	17.30 Today The Day	20.30 Strange But True	9.35 Cybill
20.30 Keeping Up Appearances	18.00 The Simpsons	21.00 P D James	10.00 Frasier
21.00 News	18.25 Star Trek	22.00 News	10.30 Rory Bremner
21.30 Dangerfield	19.15 Electric Circus	22.40 Innocent Blood	11.10 TV Offal
22.20 The Wogan Years	19.30 Top Gear	00.45 The Paul Ross Show	11.45 TFI Friday
22.55 Carrie	20.00 Exploding Hearts		12.50 Bodybags
00.30 Race With The Devil	20.30 Ground Force		2.30 The Black Room
02.00 Close	21.00 Red Dwarf		
	21.30 Shooting Stars		
	22.00 Have I Got News/You		
	22.30 Fires Within		
	00.00 Close		

Case Study 2, WS4

TV Timetables (2)

Use the programmes listings on Resource Sheet CR1 to answer these questions.

1. The listings for C4 have been written incorrectly using the 12-hour clock. Rewrite then using the 24-hour clock.

2. What programme is on BBC2 at 5.10 pm?

3. What programme starts at 7.30 pm on BBC1?

4. At what time does *Shooting Stars* begin?

5. Which show is shown at 1.25 pm and repeated at 6.00 pm?

6. At which two times is *Neighbours* shown?

7. Which programme is on C4 at 18.00 hours?

8. Which show on BBC1 starts on Saturday morning?

9. Which channel closes at midnight?

10. Does the *Paul Ross Show* start at 12.45 am or at 12.45 pm?

Case Study 2, WS5.1

Athletics

Look at the tables on *INFORMATION SHEETS 1, 2 and 3*. They show how many points you can get for different athletics events. You will get an award if you gain enough points. Use the information in the tables to answer the following questions.

1. Sam ran 100 metres in 13.5 seconds.
How many points did he score?
2. Anna ran 800 metres in 3 minutes.
How many points did she score?
3. Alex is good at high jump.
He jumped 1.76 m: how many points did he get for this?
4. Polly reached a distance of 4.12 m in the long jump.
How many points did she get?
5. Paul threw the javelin a distance of 23.83 .
How many points did he score?
6. Last year, Lisa decided to try for an award. She was 14 years old on 1 September last year.
 - (a) She ran the 200 m hurdles race in a time of 29.3 seconds.
How many points did she get for this?
 - (b) Her next event was the 100 metres; she ran this in 13.9 seconds.
How many points did she score?
 - (c) Lisa then ran in the 400 metres race and finished with a time of 57.5 seconds. How many points for this?
 - (d) Next, she took part in some field events.
In the long jump she jumped 4.50 m.
How many points did she score?
 - (e) For her javelin throw she was awarded 70 points.
How far did she throw the javelin?
 - (f) Which was Lisa's best track event?
 - (g) Which was Lisa's best field event?
 - (h) Which is Lisa's best other event (i.e. not including your answers to (f) and (g)? (It can be track or field.)

Case Study 2, WS5.2

Athletics

- (i) Counting these three events only (answers to (f), (g) and (h)), how many points did Lisa score altogether?
 - (j) Which award did she gain?
7. Paul now decides to try for an award. He will be 15 years old on 1 September this year. His best three events are the 1500 metres, the javelin and the discus.
- (a) Paul's time for running 1500 metres is 4 mins 48 secs. How many points does he score?
 - (b) He throws the javelin a distance of 23.60 m. How many points does he score?
 - (c) His discus throw is 18.50 m. How many points does he score?
 - (d) The discus weighs 1.5 kg. Use the bonus table at the bottom of *INFORMATION SHEET 2* to find how many bonus points he scores for his throw.
 - (e) What is Paul's total score?
 - (f) Which award does he get?
8. Do you think *you* could get an award?
- (b) Work out how many points you think you could get on your best three events.
 - (c) Which badge would you get for this?

Case Study 2 *AWARDS SCHEME INFORMATION SHEET 1*

Points	SPRINTS			DISTANCE		HURDLES		
	100 m	200 m	400 m	800 m	1500 m	100 m	200 m	400 m
	Time (seconds)			Time (hours, seconds)		Time (seconds)		
100		22.6	50.3	1.57	4.02	14.1	27.0	55.5
99	11.0	22.7	50.6	1.58	4.04	4.2	27.1	56.0
98		22.8	50.9	1.59	4.06	14.3	27.2	56.5
97	11.1	22.9	51.2	2.00	4.08	14.4	27.3	57.0
96		23.0	51.5	2.01	4.10	14.5	27.4	57.5
95	11.2	23.1	51.8	2.02	4.12	14.6	27.5	58.0
94		23.2	52.2	2.03	4.14	14.7	27.6	58.5
93	11.3	23.3	52.6	2.04	4.16	14.8	27.8	59.0
92		23.4	53.0	2.05	4.18	14.9	27.9	59.5
91	11.4	23.5	53.4	2.06	4.20	15.0	28.1	60.0
90		23.6	53.8	2.07	4.22	15.1	28.3	60.5
89	11.5	23.7	54.2	2.08	4.24	15.2	28.4	61.0
88		23.8	54.6	2.09	4.26	15.3	28.6	61.5
87	11.6	23.9	55.0	2.10	4.28	15.4	28.7	62.0
86		24.1	55.5	2.11	4.30	15.5	28.8	62.5
85	11.7	24.3	56.0	2.12	4.32	15.6	28.9	63.0
84		24.5	56.5	2.13	4.34	15.7	29.1	63.5
83	11.8	24.7	57.0	2.14	4.36	15.8	29.3	64.0
82	11.9	24.9	57.5	2.15	4.38	15.9	29.5	64.5
81	12.0	25.1	58.0	2.16	4.40	16.0	29.7	65.0
80	12.1	25.3	58.5	2.17	4.42	16.1	29.9	65.5
79	12.2	25.5	59.0	2.18	4.45	16.2	30.2	66.0
78	12.3	25.7	59.5	2.19	4.48	16.3	30.5	67.0
77	12.4	25.9	60.0	2.20	4.51	16.4	30.8	68.0
76	12.5	26.2	60.5	2.21	4.54	16.5	31.1	69.0
75	12.6	26.5	61.0	2.22	4.57	16.6	31.4	70.0
74	12.7	26.8	61.5	2.23	5.00	16.7	31.7	71.0
73	12.8	27.1	62.0	2.24	5.03	16.8	32.0	72.0
72	12.9	27.4	62.5	2.25	5.06	16.9	32.3	73.0
71	13.0	27.7	63.0	2.26	5.09	17.0	32.6	74.0
70	13.1	28.0	63.5	2.27	5.12	17.1	32.9	75.0
69	13.2	28.3	64.0	2.28	5.15	17.2	33.2	76.0
68	13.3	28.6	64.5	2.29	5.18	17.3	33.5	77.0
67	13.4	28.9	65.0	2.30	5.21	17.4	33.8	78.0
66	13.5	29.2	65.5	2.32	5.24	17.5	34.1	79.0
65	13.6	29.5	66.0	2.34	5.27	17.6	34.4	80.0
64	13.7	29.8	66.5	2.36	5.30	17.7	34.7	81.0
63	13.8	30.1	67.0	2.38	5.33	17.8	35.0	82.0
62	13.9	30.4	67.5	2.40	5.36	17.9	35.3	83.0
61	14.0	30.7	68.0	2.42	5.39	18.0	35.6	84.0
60	14.1	31.0	68.5	2.44	5.42	19.1	35.9	85.0
59	14.2	31.3	69.0	2.46	5.45	18.2	36.2	86.0
58	14.3	31.6	69.5	2.48	5.48	18.3	36.5	87.0
57	14.4	31.9	70.0	2.50	5.51	18.4	36.7	88.0
56	14.5	32.2	70.5	2.52	5.54	18.5	36.9	89.0
55	14.6	32.5	71.0	2.54	5.57	18.6	37.1	90.0
54	14.7	32.7	71.5	2.56	6.00	18.7	37.3	91.0
53	14.8	32.9	72.0	2.58	6.03	18.8	37.5	92.0
52	14.9	33.1	72.5	3.00	6.06	18.9	37.7	93.0
51	15.0	33.3	73.0	3.02	6.09	19.0	37.9	94.0

Case Study 2 *AWARDS SCHEME INFORMATION SHEET 2*

Points	JUMPS			THROWS		
	High jump	Long jump	Triple jump	Shot	Discus	Javelin
100	1.86	6.06	12.10	12.60	42.75	47.00
99	1.85	6.00	12.00	12.40	42.00	46.00
98	1.84	5.92	11.90	12.20	41.25	45.00
97	1.83	5.84	11.80	12.00	40.50	44.00
96	1.82	5.77	11.70	11.80	39.75	43.00
95	1.81	5.70	11.60	11.60	39.00	42.00
94	1.80	5.63	11.50	11.40	38.25	41.00
93	1.79	5.56	11.40	11.20	37.50	40.00
92	1.78	5.49	11.30	11.00	36.75	39.00
91	1.77	5.42	11.20	10.80	36.00	38.00
90	1.76	5.35	11.10	10.60	35.25	37.00
89	1.75	5.28	11.00	10.40	34.50	36.00
88	1.74	5.21	10.90	10.20	33.75	35.00
87	1.73	5.14	10.80	10.00	33.00	34.00
86	1.72	5.07	10.70	9.85	32.25	33.00
85	1.71	5.00	10.60	9.70	31.50	32.00
84	1.70	4.95	10.50	9.55	30.75	31.00
83	1.69	4.90	10.40	9.40	30.00	30.00
82	1.67	4.85	10.30	9.25	29.50	29.50
81	1.66	4.80	10.20	9.10	29.00	29.00
80	1.64	4.75	10.10	8.95	28.50	28.50
79	1.63	4.70	10.00	8.80	28.00	28.00
78	1.61	4.65	9.90	8.65	27.50	27.50
77	1.60	4.60	9.80	8.50	27.00	27.00
76	1.58	4.55	9.70	8.35	26.50	26.50
75	1.56	4.50	9.60	8.20	26.00	26.00
74	1.54	4.45	9.50	8.05	25.50	25.50
73	1.52	4.40	9.40	7.90	25.00	25.00
72	1.50	4.35	9.30	7.75	24.50	24.50
71	1.48	4.30	9.20	7.60	24.00	24.00
70	1.46	4.25	9.10	7.45	23.50	23.50
69	1.44	4.20	9.00	7.30	23.00	23.00
68	1.42	4.15	8.90	7.15	22.50	22.50
67	1.40	4.10	8.80	7.00	22.00	22.00
66	1.38	4.05	8.70	6.90	21.50	21.50
65	1.36	4.00	8.60	6.80	21.00	21.00
64	1.34	3.95	8.50	6.70	20.50	20.50
63	1.32	3.90	8.40	6.60	20.00	20.00
62	1.30	3.85	8.30	6.50	19.70	19.70
61	1.28	3.80	8.20	6.40	19.40	19.40
60	1.26	3.75	8.10	6.30	19.10	19.10
59	1.24	3.70	8.00	6.20	18.80	18.80
58	1.22	3.65	7.90	6.10	18.50	18.50
57	1.20	3.60	7.80	6.00	18.20	18.20
56	1.19	3.55	7.70	5.90	17.90	17.90
55	1.18	3.50	7.60	5.80	17.60	27.60
54	1.17	3.45	7.50	5.70	17.30	17.30
53	1.16	3.40	7.40	5.60	17.00	17.00
52	1.15	3.35	7.30	5.50	16.70	16.70
51	1.14	3.30	7.20	5.40	16.40	16.40

BONUS POINTS

Points	- 8	- 4	0	+ 4	+ 8	+12
Shot (kg)	2.75	3.25	4		5	6.25
	3					
Discus (kg)		0.75	1	1.25	1.5	1.75

Case Study 2

AWARDS SCHEME INFORMATION SHEET 3

HOW TO GAIN AN AWARD

1. For the purposes of scoring the pupil's/athlete's age shall be as at 1 September in the year of the competition.
2. Work out the points for each performance on the scoring table. If the performance comes between two scores on the table, then read off the *lower* score.
3. Add up the points for the best three events: 1 track event, 1 field event and one other (either track or field). Read off the total on the scoring table.
4. Bonus points – read off the score in the normal way and then add on or subtract the bonus points to find the actual score.

THREE EVENTS

BOYS

GIRLS

Under 10	Under 11	Under 12	Under 13	Under 14	Under 15	Senior		Under 10	Under 11	Under 12	Under 13	Under 14	Under 15	Senior
10	30	50	70	90	90	90	1*	10	30	50	70	90	90	90
40	60	85	105	125	140	140	2*	40	60	80	100	115	130	130
70	90	115	130	150	160	175	3*	70	85	105	120	135	150	160
100	120	140	155	170	185	200	4*	90	110	130	140	150	160	175
125	145	160	175	190	205	220	5*	110	135	150	160	170	180	190

Case Study 2, WS6.1

Sports Centre

Use sheet CR2 to answer these questions about the cost of taking part in sports at the Ambray Sports Centre.

1. How much does it cost to join the Centre?

2. How much does it cost to hire a badminton court
 - (a) if you are a junior member?

 - (b) if you are *not* a member?

3. How much does it cost to play badminton at off peak times?

4. How much does it cost to hire a table tennis table?.....

5. Junior players are only allowed to play squash during off peak times. How much does it cost to play squash
 - (a) if you are a member

 - (b) if you are not a member?

6. It costs £4.20 to hire a volleyball court if you are a junior member. If 14 people share the cost equally, how much will it cost each of them?

Case Study 2, WS6.2

Sports Centre

7. Simon is 16 years old. He decides to take part in some sport once a week. He has looked at the price list and decides to play squash with his friend Paul. Simon joins the Ambray Sports Centre.
- (a) How much does it cost him to join the Centre?
 - (b) How much does it cost Simon to play squash each week?
 - (c) If Simon plays once a week for 40 weeks of the year, how much does this cost him altogether?
 - (d) How much does Simon pay altogether if you include his membership for the year?
 - (e) Simon decides to buy his own racket, which costs £15. How much has he paid, including the cost of his racket, to play squash for the year?

Simon's friend, Paul, does *not* join the Centre.

- (f) How much does it cost him to play squash once each week?
 - (g) If Paul plays for 40 weeks of the year how much does this cost him?
 - (h) How much does it cost him to hire a racket each week?
 - (i) How much does he pay in racket hire for 40 weeks?
 - (j) How much does it cost Paul to play squash for the year, including the cost of racket hire?
 - (k) If you were playing squash each week with Simon would you join the Ambray Sports Centre?
- Give a reason for your answer.
-

8. (a) If you were going to take part in a sport at the Ambray Sports Centre once a week, which sport would you choose?
- (b) Would you *join* the Ambray Sports Centre?
 - (c) How much would it cost you to play your sport once each week?
 - (d) Do you think it is cheap or expensive to play your sport?

Case Study 2, CR2

Sports Centre

AMBRAY SPORTS CENTRE MEMBERSHIP

Family (Parent of parents, all children under 18)	£18.50		
Adult	£12.50		
Junior (under 18 yrs)	£7.50	Junior Holiday Club (weekly)	
Senior (60 yrs and over)	£7.50	Members	£3.30
One month only of any of the above	£2.50	Non-members	£4.00
Replacement of membership card	£2.50		

Admission

Members no charge	Adult (non-members) 50p	Under 18 (non-members) 25p
--------------------------	--------------------------------	-----------------------------------

Activity Charges	Junior members	Adult members Youth non-members	Adult non-members
Badminton court (singles or doubles)	1.60	2.40	} charges for members plus admission charge
Tennis/Basketball/Netball Court	6.00	9.00	
Five-a-Side Football – Main Hall	6.00	9.00	
Five-a-Side Football – Lower Hall	7.75	11.60	
Volleyball Court	4.20	6.00	
Table Tennis Table	.80	1.20	
Trampolining (per 2 hour session) Wed		1.15	
Trampolining (per 3 hour session)		1.60	
Bowls (per session) Occasional users		.80	
Bowls (per session). Visiting members	No adm charge	1.00	
Squash – Peak (40 mins)		.70	
Squash – Off Peak (40 mins)	.40	.50	
Badminton Adult Coaching		1.30	
Five-a-Side league		.70	
Five-a-Side	.45	.60	
Netball		.70	
Keep Fit		.70	
Off Peak Badminton (Main or Lower Hall, unbooked)	.40	.70	
Junior Club and Junior Football (session)	.50	.75	
Junior Trampoline, Gymnastics, Badminton	.70	.95	
Swimming	Junior .55	Adult .75	

Equipment Hire

Squash racket	.90
Badminton racket	.60
Five-a-Side football	.60
Shuttles	.60
Table tennis bats (two)	.60

Deposit

£5.00 will be retained should racket be broken

Case Study 2, WS7.1

Holidays

Planning a Holiday

Prices per person in £s including airport charges – No surcharge					
HOTEL AND BOARD ARRANGEMENTS	Jamaica Sol (HB)				
Hotel Code	MLJ				
Flights available	All Majorca flights				Child Reduction
Nights in hotel	7	10	11	14	
Departures on or between					
4 July – 10 July	175	218	240	260	25%
11 July – 17 July	183	217	236	280	20%
18 July – 10 Aug	220	249	258	291	10%
11 Aug – 24 Aug	190	240	262	283	10%
25 Aug – 31 Aug	189	237	250	290	20%
1 Sept – 30 Sept	174	200	214	246	25%
1 Oct – 31 Oct	148	167	176	216	50%
PLEASE QUOTE FLIGHT CODE, HOTEL CODE and NUMBER of NIGHTS REQUIRED					

- Mrs Wells leaves England on 12 July and spends 10 night at the hotel. How much does her holiday cost her?
- How much will it cost Mr and Mrs Rich if they fly to Majorca on 28 September and stay at the hotel for 11 nights?
- What will be the total cost for 4 adults for 14 nights, leaving England on 31 August?
- Mr Bennett leaves London on 9 October and spends 10 nights at the hotel. How much does this cost him?
- The reduction for children is shown in the table. How much would it cost for a child to stay in the hotel for 14 nights, leaving England on 8 July?

Case Study 2, WS7.2

Holidays

6. Work out the child reduction and then the cost for a child for:
- | | <i>Child reduction</i> | <i>Cost per child</i> |
|---|------------------------|-----------------------|
| (a) 7 nights, starting on 20 July | | |
| (b) 10 nights, starting on 22 September | | |
| (c) 14 nights, starting on 17 July | | |
| (d) 11 nights, starting on 3 September | | |
| (e) 7 nights, starting on 14 October | | |
| (f) 11 nights, starting on 6 July | | |
| (g) 10 nights, starting on 18 August | | |
| (h) 14 nights, starting on 28 August. | | |
-
7. Mr and Mrs Phillips and nine-year-old David Phillips book to go on holiday between 11 and 24 August for 11 nights.
- | | |
|---|-------|
| (a) How much will it cost for each of the adults? | ..... |
| (b) How much will it cost for David? | ..... |
| (c) What will be the total cost for the whole family? | ..... |
-
8. Mr and Mrs Phillips and nine-year-old David decide to go on holiday during the October half term break. They will stay for 11 nights.
- | | |
|--|-------|
| (a) How much will the holiday cost for each of the two adults? | ..... |
| (b) How much will it cost for David? | ..... |
| (c) What will be the total cost for the whole family? | ..... |
| (d) How much will they save by going in October instead of August? | ..... |

Case Study 2, WS7.3

Holidays

9.

Departure Airport	Flight time and dates	Take-off time	Home landing	Flight Code
EDINBURGH	3 hrs Sat 3 May-18 Oct	17.45	10.00	6081
	Sun 4 May-19 Oct	17.15	16.15	6475
ABERDEEN	3 $\frac{1}{4}$ hrs Sun 4 May-19 Oct	13.00	12.00	6024
BELFAST	3 hrs Sun 22 Jun-17 Aug	23.55	23.45	6082
HEATHROW	2 $\frac{1}{4}$ hrs Sat 3 May-18 Oct	17.15	16.15	6028
STANSTED	2 $\frac{1}{4}$ hrs Sat 3 May-18 Oct	13.30	12.45	6026
NORWICH	2 $\frac{1}{4}$ hrs Sat 3 May-18 Oct	17.30	16.45	6027

Use the information in the table to find which flight (Departure Airport and day) leaves at:

- (a) 1 pm
- (b) quarter past five in the evening
- (c) 11.55 pm.

- 10. Which flight takes off nearest to midnight?
- 11. How long is the flight time from Aberdeen?

Questions 12 to 17 are about the Phillips family in question 7.

- 12. The Phillips family fly from Heathrow.
On which day of the week will they have to fly?
- 13. At what time does their flight take off?
- 14. How long is the flight time?
- 15. The travel agent mistakenly said the flight code was 6024.
What is their correct flight code?
- 16. Look at the table on Worksheet WS5.2. What is the Phillips' hotel code?
- 17. Mr and Mrs Phillips may need to take their driving licences with them. What other important documents must they take?
.....
.....
.....

Case Study 2, WS8

Coach Journey

The journey to Majorca

	Coach 1	Coach 2	Coach 3	Coach 4
PLYMOUTH	0830	1000	1130	1230
EXETER	0925	1055	1225	1325
HEATHROW	1230	1400	1530	1630
GLOUCESTER RD	1305	1435	1605	1705
LONDON VICTORIA	1315	1445	1615	1715

1. (a) At what time does the 1055 coach from Exeter arrive at Victoria?
- (b) How long does this journey take?
2. (a) If you leave Plymouth at 1230, which number coach will you catch?
- (b) How long does this journey take?
3. The flight the Phillips' must catch leaves Heathrow at 1715 and they must be there at least 1 hour before. By what time must they arrive at Heathrow?
4. Using the timetable above, work out which coach the Phillips' must catch from Plymouth to arrive at Heathrow in time.
5. How long does the coach journey from Plymouth to Heathrow take?
6. They have a snack on the coach.

From the menu, work out which items they bought if they spent

MENU	
Tea	30p
Coffee	45p
Cola	40p
Sandwich	85p
Biscuits (pkt)	22p
Choc Bar	24p
Wafer Bar	19p

- (a) 49p
 - (b) 69p
 - (c) £1.07
 - (d) £1.60 (not 4 colas)
7. What is the change from £1 if they buy:
 - (a) 1 cola and 1 packet of biscuits
 - (b) 1 wafer bar and 1 teas?

Case Study 2, WS9.1

Car Hire

Day Trips

The Phillips decide to hire a car to explore the island. The cost is 8000 pesetas per week and 15 pesetas per kilometre.

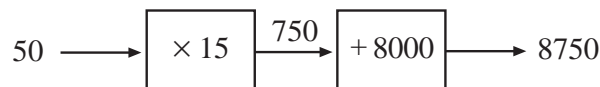
Give the answers to the following questions in pesetas.

1. How much will it cost if they travel only 20 km in the week?
2. If they hire the car for a week and travel 100 km, how much will it cost them?



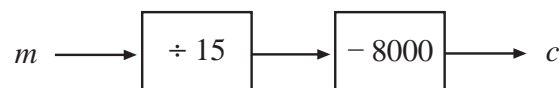
Use the number machine above to work out the cost in pesetas, c , for the following kilometres, m , setting your calculations out like this:

If $m = 50$,



Cost = 8750 pesetas.

- | | |
|-----------------------------|-----------------------------|
| (a) $m = 80$, $c =$ | (b) $m = 150$, $c =$ |
| (c) $m = 225$, $c =$ | (d) $m = 168$, $c =$ |
4. Draw a machine like this that will work backwards.



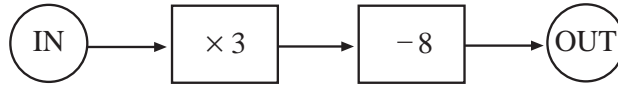
Use your machine to work out the number of kilometres, m , if the cost is

- | | |
|--------------------------|------------------------|
| (a) 8900 pesetas | (b) 9725 pesetas |
| (c) 12 500 pesetas | (d) 9395 pesetas |

Case Study 2, WS9.2

Car Hire

5.



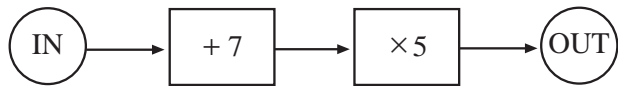
Using the number machine above, what number comes out if the following number went in?

- | | | | |
|-----------------------|-----------|------------|-----------|
| (a) IN 5 | OUT | (a) IN 12 | OUT |
| (c) IN 20 | OUT | (d) IN 50 | OUT |
| (e) IN $2\frac{1}{2}$ | OUT | (f) IN 7.3 | OUT |

What number went in if the number out was

- | | | | |
|------------|----------|-------------|----------|
| (g) OUT 16 | IN | (h) OUT 22 | IN |
| (i) OUT 82 | IN | (j) OUT 217 | IN |

6.



What number comes out if the following number went in?

- | | | | |
|-----------|-----------|-----------|-----------|
| (a) IN 3 | OUT | (b) IN 15 | OUT |
| (e) IN 30 | OUT | (f) IN 75 | OUT |

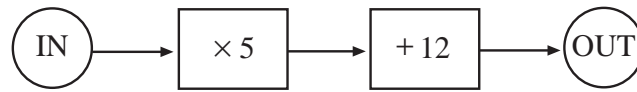
What number went in if the number out was

- | | | | |
|-------------|----------|-------------|----------|
| (g) OUT 65 | IN | (h) OUT 125 | IN |
| (i) OUT 175 | IN | (j) OUT 285 | IN |

Case Study 2, WS9.3

Car Hire

7.



What number comes out if the following number went in?

- (a) IN 2 OUT
- (b) IN 7 OUT
- (e) IN 12 OUT
- (f) IN 16 OUT

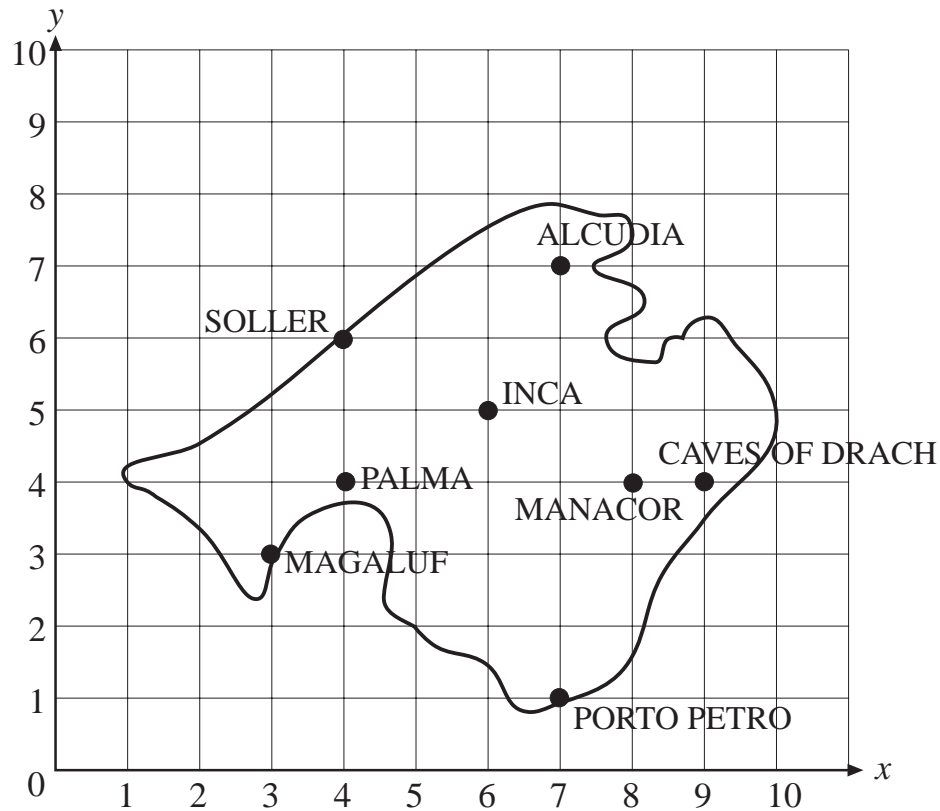
What number went in if the number out was

- (g) OUT 32 IN
- (h) OUT 57 IN
- (i) OUT 87 IN
- (j) OUT 147 IN

Case Study 2, WS10

Majorca

Sketch map of Majorca



The coordinates of MANACOR are 8 along the x axis and 4 along the y axis.
This is written as MANACOR (8, 4).

Fill in the coordinates of the other places marked on the map.

ALCUDIA (..... ,)

CAVES OF DRACH (..... ,)

INCA (..... ,)

PALMA (..... ,)

SOLLER (..... ,)

MAGALUF (..... ,)

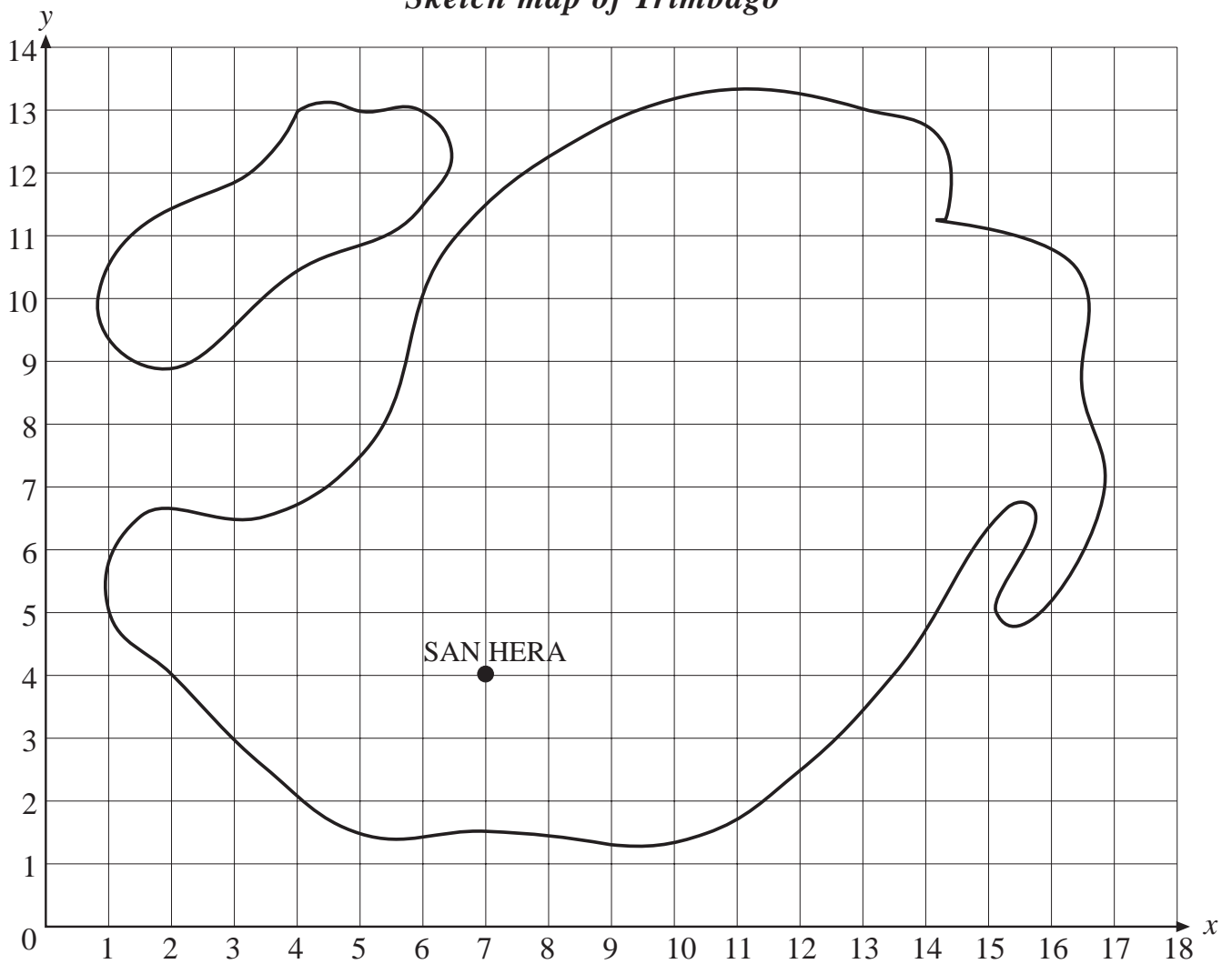
PORTO PETRO (..... ,)

Case Study 2, WS11

Trimbago

The two islands which make up Trimbago are shown here, but the place names are missing. Use the coordinates given to mark their positions on the map.

Sketch map of Trimbago



The capital is San Hera (7, 4) – this has been plotted for you.

Lovers Leap	(13, 13)	High Hill	(10, 9)
Juan Carlo	(16, 9)	Great Cliff	(11, 2)
Polsa	(2, 4)	Ocosta	(15, 11)
Hwayne	(5, 7)	Chirdar	(9, 8)
Hells Mouth	(1, 10)	Bridsio	(7, 11)
Debso	(5, 12)	Tomta	(12, 6)

Case Study 2, Test 1

1. Give these times in 24-clock times.

(a) 4.50 pm

(b) 11.30 am

(c) 1.20 pm

(d) 12.15 am

1. Give these times in am/pm times.

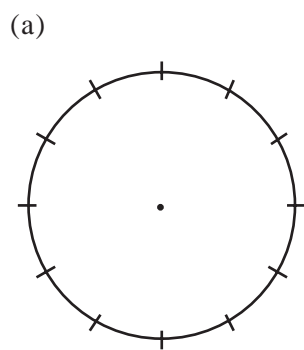
(a) 1425

(b) 0350

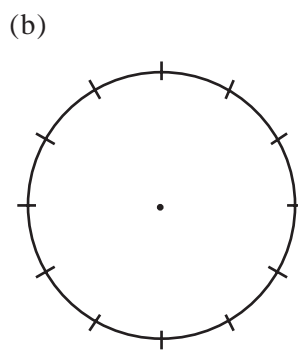
(c) 0010

(d) 2140

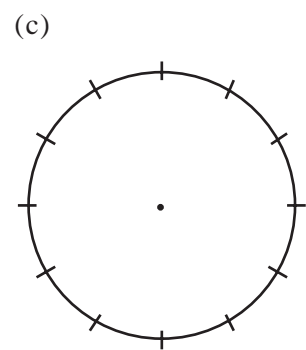
3. On these clocks, mark the times shown.



12.15 pm



2330 hours



2.45 am

Case Study 2, Test 1

4. Here are the programmes on Radio 4 one Saturday.

5.30 am	World News	.....
6.00 am	Briefing	.....
6.05 am	Sports Desk	.....
6.10 am	Open Country	.....
7.00 am	Today	.....
9.00 am	Home Truths	.....
10.00 am	Loose Ends	.....
11.00 am	The Food Programme	.....
11.30 am	From Our Own Correspondent	.....
12.00 midday	Money Box	.....
12.25 pm	In The Chair	.....
12.55 pm	Weather	.....
1.00 pm	News	.....
1.10 pm	Any Questions?	.....
2.00 pm	Any Answers?	.....
2.30 pm	Casanova	.....
3.00 pm	Saturday Play	.....

- (a) For each programme, write its starting time in 24-hour clock time.
- (b) For how long does 'Today' last?
- (c) For how long does 'Money Box' last?
- (d) For how long does 'Any Questions?' last?

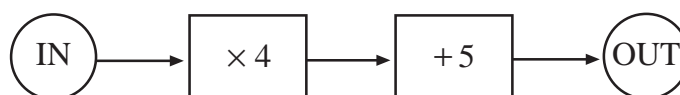
Case Study 2, Test 1

5. Here is part of a train timetable for Amsterdam-Paris trains.

Amsterdam	0724	0754	0824	0924	0954
Rotterdam	0824	0854	0924	1024	1054
Antwerp	0940	↓	1040	1140	↓
Brussels	1020	1032	1120	1220	1232
Paris	-	1205	-		1405

- (a) How long does it take to travel from Amsterdam to Rotterdam?
- (b) How long does it take to travel from Antwerp to Brussels?
- (c) How long does it take to travel from Brussels to Paris?
- (d) If you arrive at the station at Rotterdam at quarter to nine, at what time will you get to Paris?
- (e) If you arrive at Antwerp station at 11.30 am, at what time will you get to Brussels?
- If you change trains at Brussels, at what time will you get to Paris?

6. Here is a number machine.



(a) For each number IN, find the number OUT.

<i>Number IN</i>	<i>Number OUT</i>
2
10
$5\frac{1}{2}$

(b) For each number OUT, find the number IN.

<i>Number IN</i>	<i>Number OUT</i>
.....	17
.....	45
.....	15