

Mathletics

Series



Teacher



Time



Series F – Time

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Series F – Time

Page 1

1a 120

b 15

c 30

d 45

e 240

f 360

2a 120

b 300

c 3,600

d 1,800

e 30

f 900

3a 120

b 100

c 28

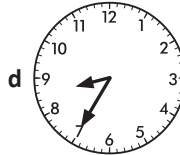
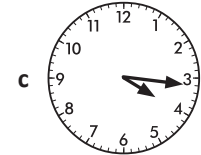
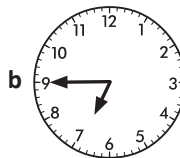
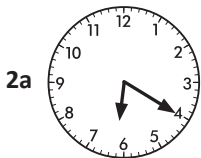
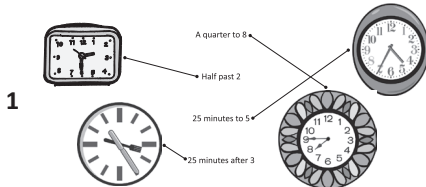
d 50

e 168

f 730

4 minutes; years; days; minutes

Page 2



3a 5 minutes to 7

b 23 minutes past 3

c 12 minutes to 11

d 12 minutes past 5

Page 3

1a 8:00 am

b 4:30 pm

c 11:25 pm

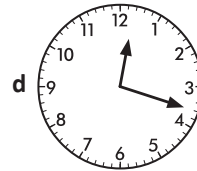
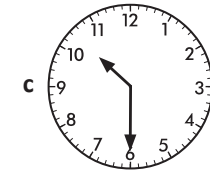
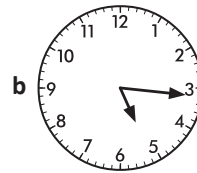
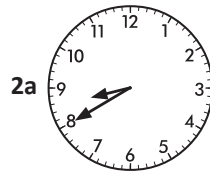
d 7:13 am

e 7:01 am

f 10:20 pm

g 5:32 pm

h 9:10 am



3a 1 11:10 am

2 11:38 am

3 3:35 pm

4 5:15 pm

Page 4

1a 5:00

b 8:35

c 2:22

d 9:04

2a 8:00 or 20:00

b 6:15 or 18:15

c 9:30 or 21:30

d 1:18 or 13:18

3a 17:15

b 8:39

c 16:07

4a 4:15 pm

b 10:43 am

c 1:34 am

Page 5

1 3 hours 26 minutes

2

	¹ 5	0		² 1	5
³ 8	0		⁴ 2	4	
4		⁵ 3	0		⁶ 7
	⁷ 4	9		⁸ 1	2
⁹ 7	5		¹⁰ 4	0	
2		¹¹ 9	8		¹² 7

Page 6

Name	Nickname	Time	Snack
Akhil	Bug	15 minutes	Chips
Houman	Haz	20 minutes	Candies
Sean	Tops	10 minutes	Soft drink
Dan	Hank	5 minutes	Chocolate

Page 7

Observe students.

Pages 8–10

1a 8 hours

b 7 hours

c 9 hours

d 5 hours 30 minutes

2a 70

b 13; 15

c 2; 25

3a 45 minutes

b 3 hours 30 minutes

c 17 hours

d 12 hours

4a 6:10 am

b 8:30 am

c 2:45 pm

d 1:45 am

5a 9:45; 10:30; 10:45; 11:00

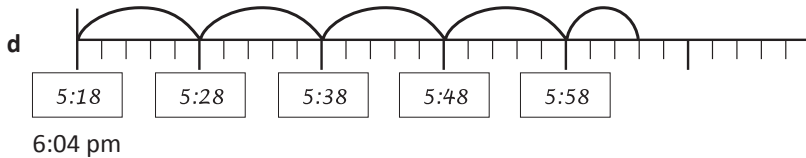
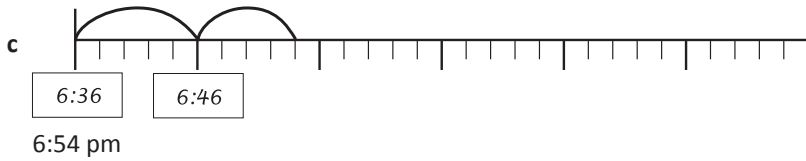
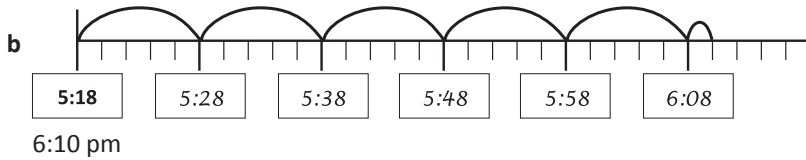
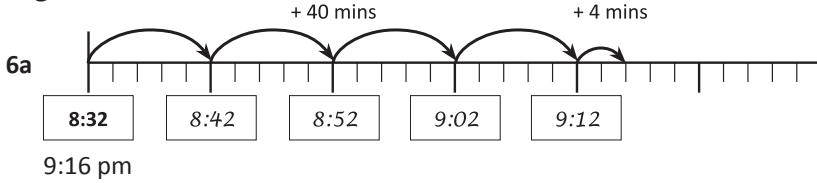
b 8:02; 8:12; 8:32; 8:42

c 7:02; 7:17; 7:47; 8:17

d 3:03; 3:13; 3:23; 3:33; 3:43; 3:53

Series F – Time

Pages 8–10



Page 11

1 Answers will vary.

2

Stopwatch display	Minutes	Seconds	Hundredths of a second
3:51:22	3	51	22
2:45:79	2	45	79
1:58:87	1	58	87
5:45:78	5	45	78

3 1:36:65; 1:38:42; 1:56:89; 1:56:99

Page 12

What to do

Observe students.

Page 13

What to do

Tina Sparkles

- Tina Sparkles could catch the 5:10 pm train and arrive at 5:40 pm.
- Rod Raver was rehearsing from 3:55 pm to 6:25 pm.
- Paparazzi Pete was busy from 4.15 pm to 5.15 pm.

Page 14

- 1a 6:05
b 7 mins
c 6:00

- 2a 8:00 pm
b 1 hour
c 1 hour
d 8:30 pm
e 2 hours

Pages 15–16

- 1a 19:48
b 20:12
c No

1d Croydon, Summer Hill, Stanmore and Newtown

e 21:10

f 21

2a 8:35 am

b 4:39 pm

3a 4 pm

b 11:25 am

c 7:30 pm

Page 17

1a Train: Catch the 2:05 pm from Trinian Street. Change at Carlsford and wait 3 minutes.;
Bus: Catch the 2:20 pm from Carlsford. Arrive at Nottsville 2:50 pm.

b Train: Catch the 10:16 am from Knightscove. Change at Carlsford and wait 5 minutes.;
Bus: Catch the 11:20 am from Carlsford. Arrive at Fisherman's Wharf 12:12 pm.

c Train: Catch the 12:21 pm from Fig Tree Park. Change at Carlsford and wait 4 minutes.;
Bus: Catch the 1:20 pm from Carlsford. Arrive at Slamton 3:32 pm.

Pages 18–19

Name	Show	Night	Channel
Luke	Football	Saturday	5
Macey	Reality	Thursday	Sky 1
Jamie	Sitcom	Tuesday	4
Hung	Crime	Monday	BBC 2
Britt	Cartoon	Wednesday	BBC 1

	Luke	Macey	Jamie	Hung	Britt
Monday	X	X	X	✓	X
Tuesday	X	X	✓	X	X
Wednesday	X	X	X	X	✓
Thursday	X	✓	X	X	X
Friday	X	X	X	X	X
Saturday	✓	X	X	X	X
Sunday	X	X	X	X	X
Sport	✓	X	X	X	X
Reality	X	✓	X	X	X
Crime	X	X	X	✓	X
Cartoon	X	X	X	X	✓
Sitcom	X	X	✓	X	X
BBC 2	X	X	X	✓	X
Channel 5	✓	X	X	X	X
Sky 1	X	✓	X	X	X
BBC 1	X	X	X	X	✓
Channel 4	X	X	✓	X	X

Series F – Time

Page 20

What to do

Answers will vary.

Sample answers:

Session	Time	Activity
1	9:00	<i>Clown school</i>
2	10:00	<i>Acrobatics</i>
	11:30 – 12:10	Recess
3	12:15	<i>Flying trapeze</i>
4	12:55	<i>Fire juggling</i>
	1:30 – 2:30	Lunch
5	2:35	<i>Balloon animals</i>
6	3:20	<i>Magic tricks</i>
7	4:10	<i>Face painting</i>
	4:35 – 5:00	Break
8	5:05	<i>Unicycling</i>
	6:00	Home

or reverse
or reverse
interchangeable
must be here

Measuring time

Name _____

1 What are these time relationships?

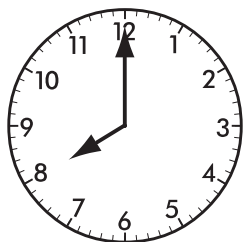
a 1 decade years

b fortnight days

c 4 hours minutes

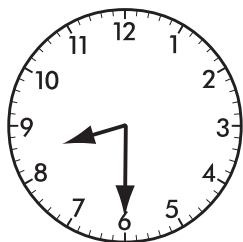
d $\frac{3}{4}$ hour minutes

2 Express these times in digital form:



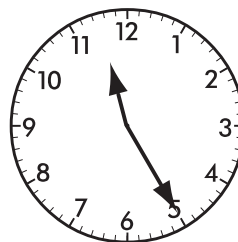
morning

a : am



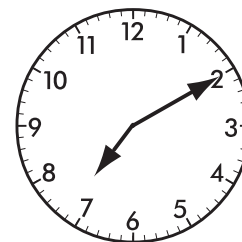
evening

b : pm



evening

c : pm



morning

d : am

3 Complete the table with the correct analogue, digital and 24-hour times:

	8:46 am		4:25 pm
13:00		19:12	

4 Convert these times into 24-hour or digital time:

a 18:00 =

b 07:00 =

c 14:25 =

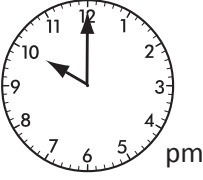
d 7:26 pm =

e 10:00 am =

f 9:35 pm =


Skills	Not yet	Kind of	Got it
• Recognises time relationships			
• Matches analogue and digital clocks			
• Converts between 24-hour time and am or pm notation			

1 Calculate the elapsed time for each of the following:

<p>a</p> <p style="text-align: center;">Start Finish</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input style="width: 100%; height: 20px;" type="text" value="7:30 pm"/> Elapsed time <input style="width: 100%; height: 20px;" type="text"/> </div> <div style="width: 45%; text-align: center;">  </div> </div>


2 Use the time line for each elapsed time problem. Each large interval is 10 minutes, each small one is 2 minutes. Show all your working. Remember to work the hours out first and use the time line for the minutes.

a Melanie left home for netball training at 5:46 pm. She got home again 2 hours and 24 minutes later. What time did she arrive home?




:

b Zac's mum got stuck in a traffic jam on her way home from work. It took her 1 hour and 48 minutes to get home. What time did she get home if she left work at 5:45 pm?



:

c Will's football training went for 3 hours and 26 minutes. It began at 8:45 am. What time did he finish?



:

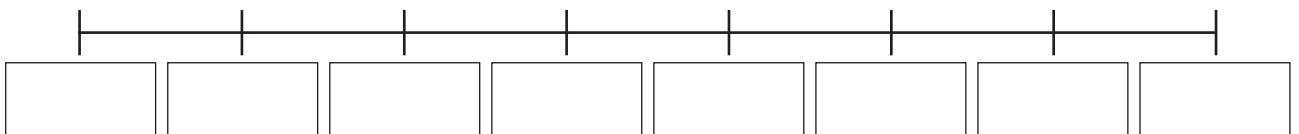
Skills	Not yet	Kind of	Got it
• Calculates the passing of time in hours and minutes			
• Uses a time line to calculate elapsed and finish times			

1 Answer the questions about this timetable:

Station	Time			
Knightscope	10:16 am	11:16 am	12:16 pm	1:16 pm
Fig Tree Park	10:21 am	11:21 am	12:21 pm	1:21 pm
Trinian Street	11:05 am	12:05 pm	1:05 pm	2:05 pm
Carlsford	11:15 am	12:18 pm	1:16 pm	2:17 pm

- a What time does the earliest train leave Knightscope? _____
- b At what time will I get to Carlsford if I get on the train at Fig Tree Park at 12:21 pm? _____
- c How long does it take to get from Knightscope to Carlsford if I get the 1:16 pm train from Knightscope? _____
- d If I want to get to Trinian Street by 1:15 pm and I live at Fig Tree Park, which train should I get? _____

2 Create a timeline based on your ideal day. Include 4 things you would do. Label the times and connect each activity with a line to the time that you would do them:



Skills	Not yet	Kind of	Got it
• Reads and interprets simple timetables			
• Creates simple time line			

3 Use the train timetable to answer the questions below. Answer in digital form:

Chesterfield to Bakersville						
Chesterfield	6:20 pm	6:50 pm	8:17 pm	9:25 pm	10:32 pm	11:39 pm
Harrison Place	---	7:00 pm	8:27 pm	9:35 pm	---	11:49 pm
Summer Hill	6:34 pm	7:05 pm	8:32 pm	9:40 pm	9:46 pm	11:54 pm
Sandwick	---	7:12 pm	8:39 pm	9:47 pm	9:53 pm	12:01 pm
Bakersville	5:44 pm	7:18 pm	8:45 pm	9:53 pm	9:58 pm	12:06 pm

- a What time does the 8:17 pm train from Chesterfield arrive at Summer Hill? _____
- b What time does the 7:00 pm train from Harrison Place arrive at Bakersville? _____
- c Dan arrives at Sandwick station at 6:56 pm. How long does he have to wait for the next train? _____

4 Use the gym timetable to answer the questions below:

Time	Monday	Tuesday	Wednesday	Thursday	Friday
12:30 pm	Pilates	Squash	Yoga	Weights	Cardio
2:30 pm	Cardio	Pilates	Pilates	Squash	Pilates
4:30 pm	Yoga	Boxing	Squash	Pilates	Boxing
6:30 pm	Squash	Weights	Boxing	Boxing	Weights

- a Leo stretches for 10 minutes after his cardio session on Monday. What time does he finish his stretches if his cardio session goes for one hour? _____
- b Tanya wants to go to yoga on Wednesday and it takes 20 minutes to drive there. To make sure that she is there 5 minutes before the class starts, at what time should she leave? _____
- c Sam has just finished her gym session on Thursday night. She did a boxing class for one hour and then ran on the treadmill for 20 minutes. What time is it now? _____

Skills	Not yet	Kind of	Got it
<ul style="list-style-type: none"> Reads, interprets and uses timetables from real-life situations, including those involving 24-hour time 			

Series F – Time – Student Progress Record

Name _____ Class _____ Date _____

What went well: _____

What I need to improve: _____



Series F – Time – Student Progress Record

Name _____ Class _____ Date _____

What went well: _____

What I need to improve: _____

Series F – Time

ASSESSMENT ANSWERS

Page 4

1a 10

b 14

c 240

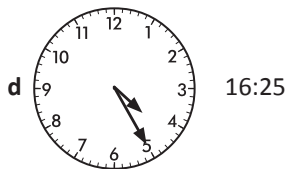
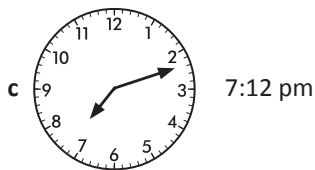
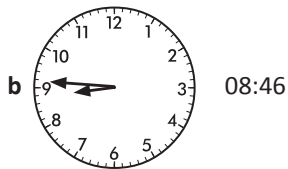
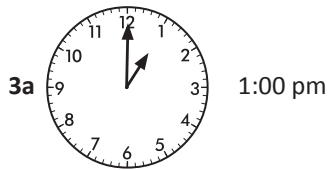
d 45

2a 8:00 am

b 8:30 pm

c 11:25 pm

d 7:10 am



4a 6:00 pm

b 7:00 am

c 2:25 pm

d 19:26

e 10:00

f 21:35

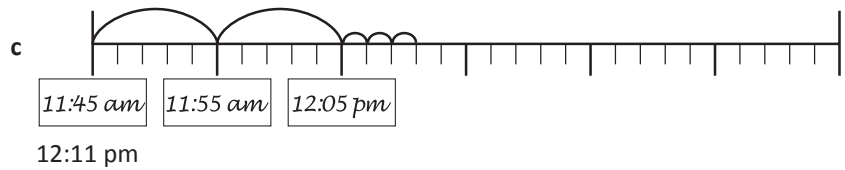
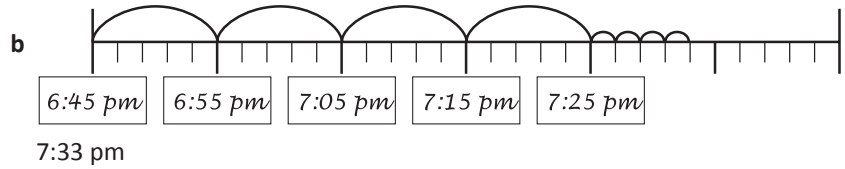
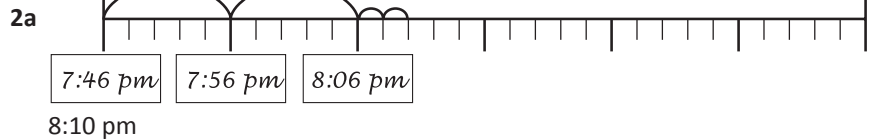
Page 5

1a $2\frac{1}{2}$ hours

b 6 hours 5 minutes

c 14 hours

d 2 hours 55 minutes



Pages 6–7

1a 10:16 am

b 1:16 pm

c 1 hour 1 minute

d 12:21 pm

2 Answers will vary.

3a 8:32 pm

b 7:18 pm

c 16 minutes

4a 3:40 pm

b 12:05 pm

c 7:50 pm

Series F – Time

Topic	Reference	Strand	Objective
Measuring time	5M4	Measurement	Solve problems involving converting between units of time.
Calculating time	5M4	Measurement	Solve problems involving converting between units of time.
Timetables	5S1	Statistics	Complete, read and interpret information in tables, including timetables.