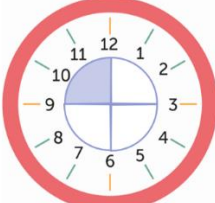
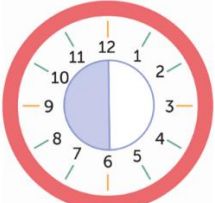
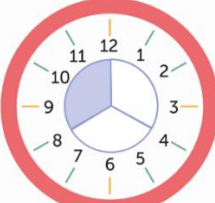
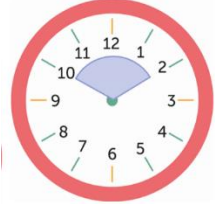
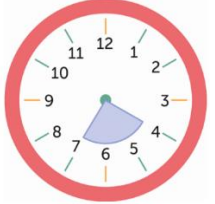
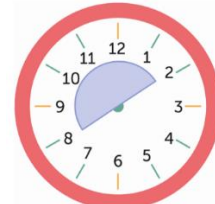


## Fractions of time

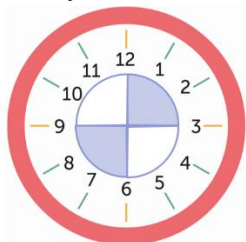
## REHEARSE

What fraction of the clock is shaded and how many minutes is that?

 $\frac{1}{4}$ hour    15 minutes	 $\frac{1}{2}$ hour    30 minutes	 $\frac{1}{3}$ hour    20 minutes
 $\frac{1}{3}$ hour    20 minutes	 $\frac{1}{4}$ hour    15 minutes	 $\frac{1}{2}$ hour    30 minutes

## APPLY AND EXPLORE

How could you describe the shaded section of the clock? *As appropriate – example below.*

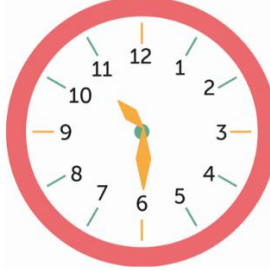
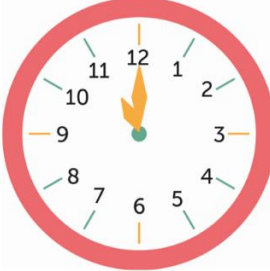
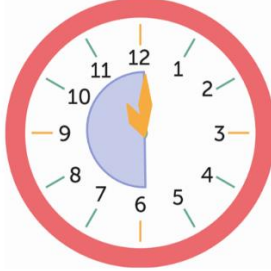
Can you use all the words in the list? *Probably not third.*




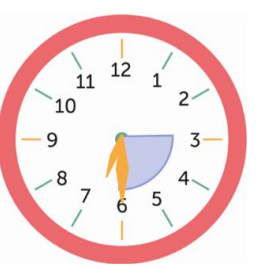
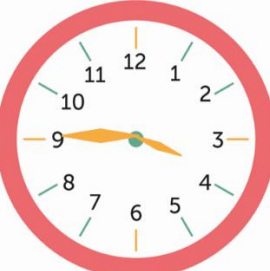

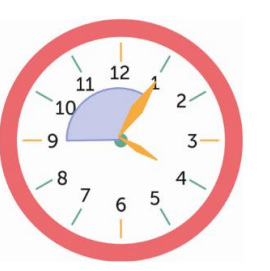
2 quarters of the clock are shaded.  
The whole is 60 minutes or 1 hour.  
The fraction of the clock shaded is  $\frac{1}{4}$  and another  $\frac{1}{4}$   
which is  $\frac{2}{4}$ . This is 15 minutes and 15 minutes which  
is 30 minutes or half an hour.

quarter  
third  
half  
whole  
hour  
minutes  
fraction

## REHEARSE

Complete the table to show the start and end times and duration.

Start	End	Duration (Length of time)
half past 10 	11 o'clock 	 $\frac{1}{2}$ hour 30 minutes

<p>quarter past 6</p> 	<p>half past 6</p> 	 <p><math>\frac{1}{4}</math> hour 15 minutes</p>
<p>quarter to 4</p> 	<p>five past 4</p> 	 <p><math>\frac{1}{3}</math> hour 20 minutes</p>

### RETRIEVE

Can I still use a range of subtraction strategies?

$100 - 1 = 99$

$18 - 4 = 14$

$31 - 10 = 21$

$59 - 30 = 29$

$63 - 29 = 34$

### APPLY AND EXPLORE

Use what you know about fractions of time to work out the following problems.

Put these times in order (shortest to longest):

quarter of an hour

$\frac{1}{2}$  hour

40 minutes

$\frac{3}{4}$  hour

50 minutes

Book club lasts for 20 minutes. What fraction of an hour is this?

$\frac{1}{3}$  hour

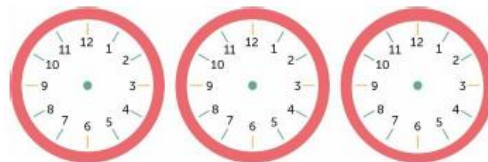
If it starts at half past 12, what time does it finish? 10 to 1

Mary walked for  $\frac{3}{4}$  of an hour each day for 3 days.

In total, did she walk for more than 2 hours? Yes

How do you know? As appropriate – pupils may:

- annotate the clocks to show 3 lots of  $\frac{3}{4}$
- add 3 lots of 45 minutes and show this is more than 120
- annotate each quarter on a clock



Cupcakes take 15 minutes to bake. How many sets of cupcakes can be baked in  $1\frac{1}{2}$  hours? 6

How could you prove it? Using annotations on clocks as above, adding to or subtracting from 90 minutes, using scaling showing understanding of 2 quarters in each half hour, counting up in quarters 6 times.



What is the time? half past 3

What time will it be in  $\frac{1}{4}$  of an hour? quarter to 4