# Time





## Starter

$$|2|735 \div 5 =$$

$$24 \div 4 = 60$$

$$240 \div 4 = 60$$

$$2735 \div 5 =$$

## Clock face



#### Second hand:

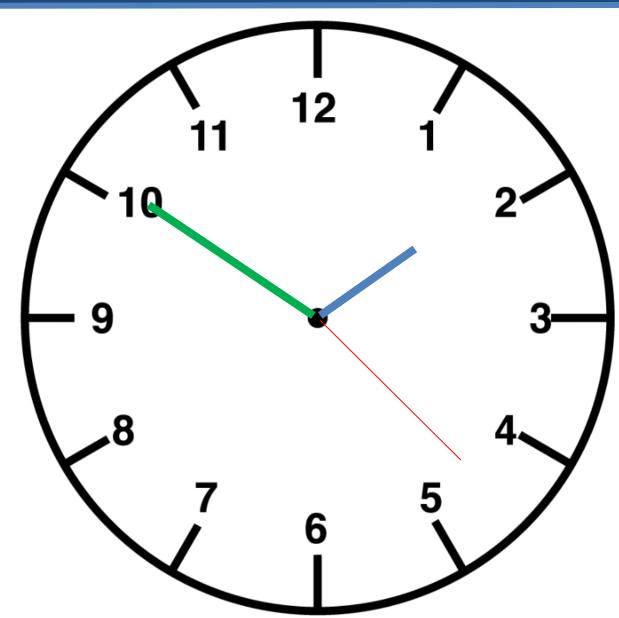
60 seconds to do a full circle.

#### Minute hand:

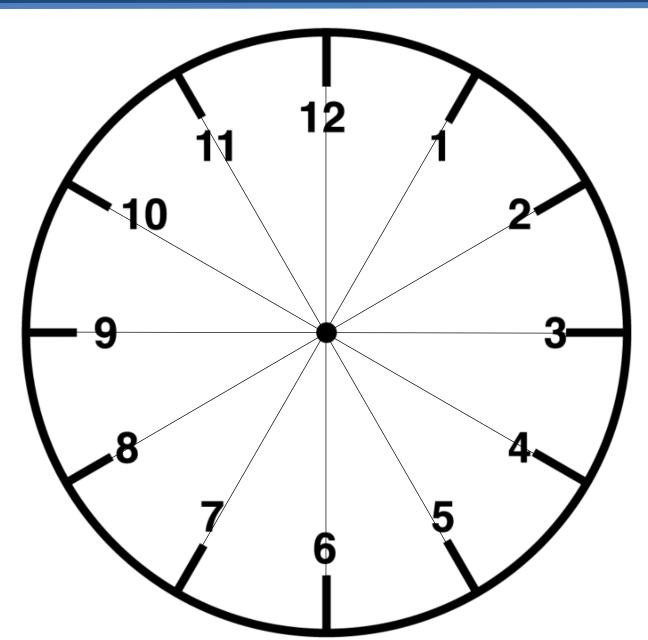
60 minutes to do a full circle.

#### **Hour hand:**

12 hours to do a full circle.





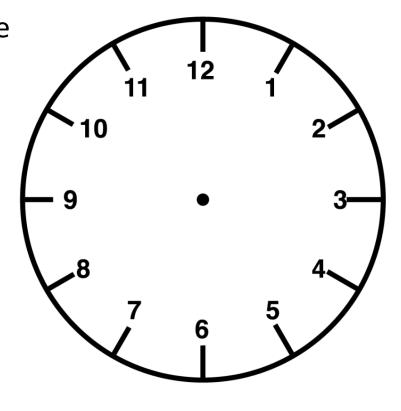


# Questions



- What is the sum of the numbers on the clock face?
- If you multiply the opposite numbers, which pair has the largest product?
- Put a number from the clock in each section

	Square	Prime
Even		
Odd		



- 4 What is the smallest fraction you can make from these numbers?
- Using any numbers on the clock and the operation  $+ x \div$ , Make 300.

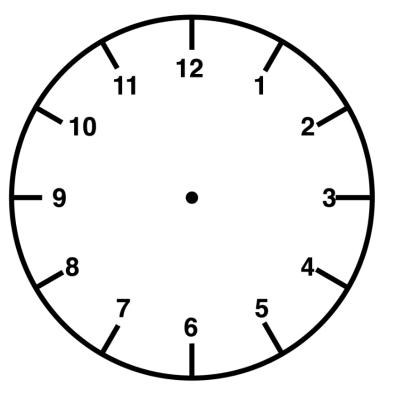


- What is the sum of the numbers on the clock face? 78
- If you multiply the opposite numbers, which pair has the largest product?

$$12 \times 6 = 72$$

Put a number from the clock in each section

	Square	Prime
Even	4	2
Odd	9	5

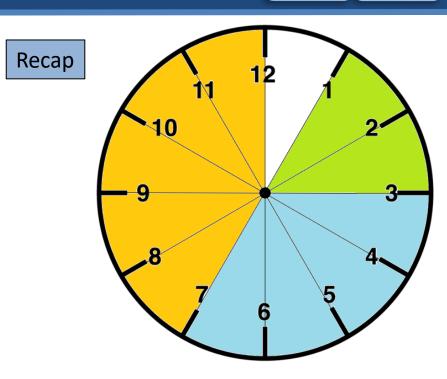


- 4 What is the smallest fraction you can make from these numbers?
- Using any numbers on the clock and the operation  $+ x \div$ , Make 300. E.g.  $3 \times 10 \times 11 (5 \times 6)$

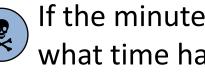
# Angles



- How many degrees in a full turn?
- What is the angle from 12 to 6?
- What is the angle from 12 to 3?
- What is the white angle?
- What is the green angle?
- What is the blue angle?
- What is the orange angle?
  - How many degrees would represent a minute? (minute hand)

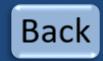


How many seconds would represent 1° turn of the minute hand?



If the minute hand turns 162°, what time has passed? Answer in minutes.

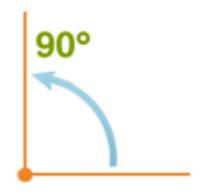
# Recap on angles





#### Full turn.

Angles about a point.



#### Quarter turn.

Angles in a right angle.

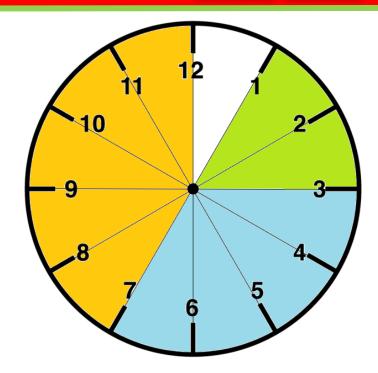


#### Half turn.

Angles on a straight line.



- 1 How many degrees in a full turn? 360°
- What is the angle from 12 to 6? 180°
- What is the angle from 12 to 3? 90°
- 4 What is the white angle? 30°
- What is the green angle? 60°
- What is the blue angle? 120°
- What is the orange angle? 150°
  - How many degrees would represent a minute? 6°



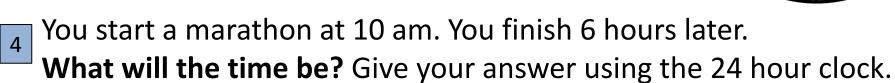
How many seconds would represent 1° turn of the minute hand? 10 seconds



If the minute hand turns 162°, what time has passed?

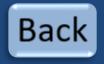
1620 seconds = 27 minutes

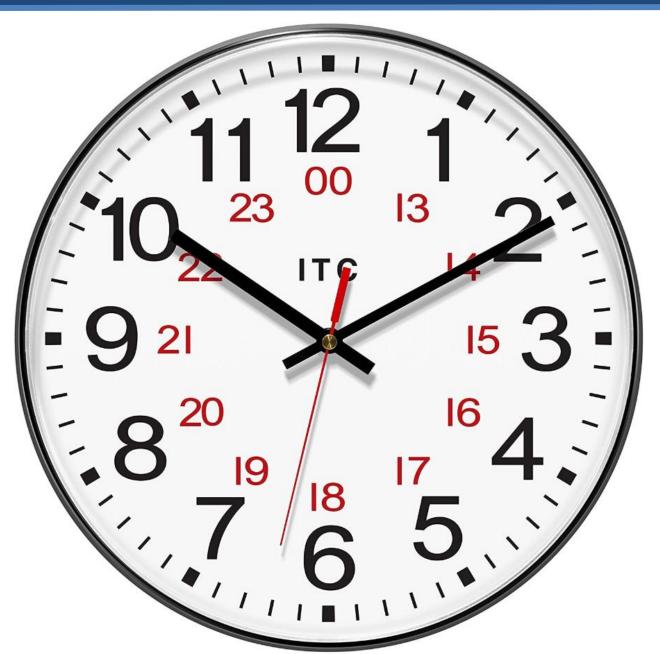
- How many full circles will the hour hand turn in a day?
- Where will the hour hand be pointing 15 hours after midnight?
- The time is 20:00, what number is the hour hand pointing to?



- 5 What is the time 50 minutes after 23:30?
- 6 How many minutes have passed between 17:15 and 18:06?
- 7 How many full turns of the clock face will the hour hand do in a year?

# Recap on 24 hour clock







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- How many full circles will the hour hand turn in a day?
- Where will the hour hand be pointing 15 hours after midnight?
- The time is 20:00, what number is the hour hand pointing to?
- You start a marathon at 10 am. You finish 6 hours later. 16:00 What will the time be? Give your answer using the 24 hour clock.
- What is the time 50 minutes after 23:30? 00:20
- How many minutes have passed between 17:15 and 18:06? 51 mins
- 7 How many full turns of the clock face will the hour hand do in a year?

# Problem solving



- 1 How many minutes in  $5\frac{1}{4}$  hours?
- 2 How many minutes is 225 seconds?
- The time in Rio is three hours behind London.

  The time in New York is five hours behind London.

  What is the time in New York when it is 1.00 am in Rio?
- What is one quarter of 5 hours? Pick one.

  1 hr 15 mins, 115 minutes, 1 hr 25 mins, 125 minutes.

A television channel shows 12 minutes of adverts in each half hour. How many minutes of adverts does it show from 5am to 11pm?



- 1 How many minutes in  $5\frac{1}{4}$  hours?  $5 \times 60 + 15 = 325$  mins
- 3 x 60 = 180 seconds 180 + 45 = 225 3 minutes 45 seconds 3 x 60 = 180 seconds 3 minutes 45 seconds
- The time in Rio is three hours behind London.
  The time in New York is five hours behind London.
  What is the time in New York when it is 1.00 am in Rio?

  4am in London
  11pm in New York
- What is one quarter of 5 hours? Pick one.

  1 hr 15 mins, 115 minutes, 1 hr 25 mins, 125 minutes.
- A television channel shows 12 minutes of adverts in each half hour.

  How many minutes of adverts does it show from 5am to 11pm?

  18 hours 24 mins per hour 18 x 36 = 648 minutes

## End of the lesson



### Well done for completing the lesson.

