

Working with hours and minutes

Let's go back to example 3 that we didn't answer on the factsheet **Calculating time - introduction**.

Example

What is two hours and twenty minutes added to six hours and forty minutes?

Answer: there are two methods you can use:

Method 1 First add together the hours and minutes separately:

$$2 + 6 = 8 \text{ hours} \quad \text{and} \quad 20 + 40 = 60 \text{ minutes}$$

This 60 minutes makes another hour (remember 60 mins = 1 hour). So add this hour to the other 8 hours.

$$8 + 1 = 9$$

The answer is **9 hours**.

Method 2 A longer method that can be useful when you're taking away is to change both amounts into minutes first.

$$\begin{array}{l} 2 \text{ hours } 20 \text{ minutes} \text{ is } 2 \times 60 + 20 = 140 \text{ minutes} \\ 6 \text{ hours } 40 \text{ minutes} \text{ is } 6 \times 60 + 40 = 400 \text{ minutes} \end{array}$$

Adding them gives:
 $140 + 400 = 540$ minutes.

To change this into hours divide by 60:
 $540 \div 60 = 9$

The answer is **9 hours**.

Method 1 is the best to use for adding amounts or for taking away when the number of minutes to be subtracted is less, eg 5 hrs 20 mins, minus 3 hrs 10 mins. If this is not the case, use method 2.