

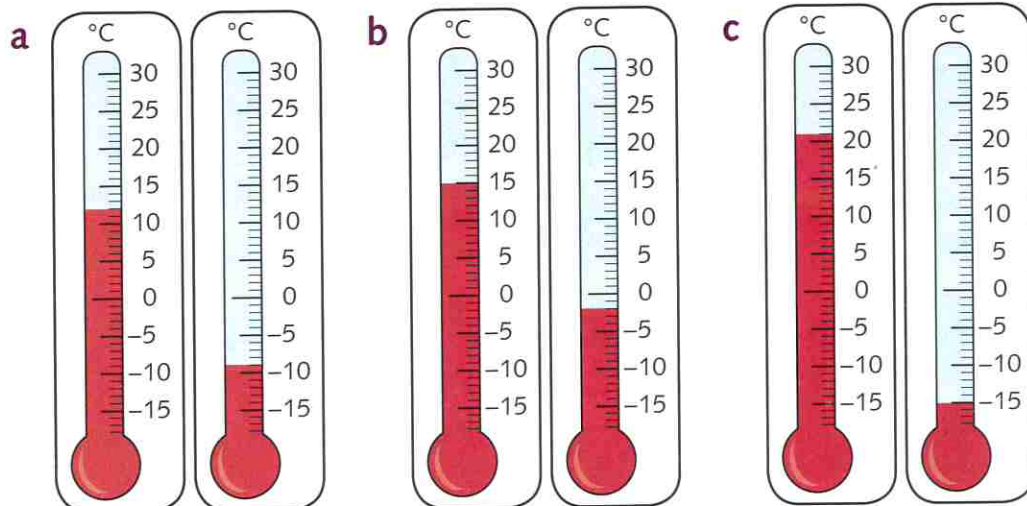
Negative problems

Use negative numbers in context and solve multi-step problems

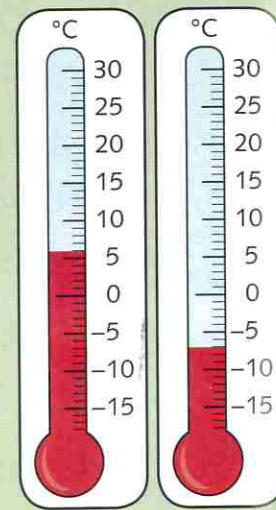


Challenge 1

Read the temperatures on each pair of thermometers. How much has the temperature changed by?



Example



6°C -7°C

Temperature difference: 13°C

Challenge 2

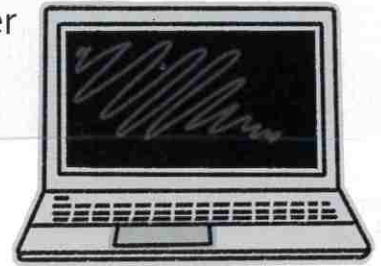
1 Joe has £40 in his bank account on Monday. Work out how much money Joe has in his account after each event described in questions **a** to **d** below. The answer to each question is the balance that Joe has to start with for the next question.

- On Tuesday, he spends £75 on a new pair of trainers. What is his balance now?
- His mum says he must work to earn the money he owes. So, on Wednesday, he works in a shop and gets paid £27. What is his balance now?
- On Thursday, the next door neighbour asks Joe to mow his lawn and pays him £10. What is his balance now?
- On Friday, his favourite band releases a new album. It costs £8.99 to download. What will his balance be if he buys it?
- Do you think he should download the album now or wait until he earns some more money? Explain your reasons.



2 Fahmida has a balance of £45 in her bank account.

- a Fahmida's laptop stopped working and she needed another one for school. It cost her £150. What is her balance after buying the laptop?
- b She gets a Saturday job to earn some money. Each week she is paid £28. How many weeks will it be until she does not have a negative bank balance?



3 Write a number problem using these amounts. Write the answer to each problem.

a $£18$ $-£39$ $+£5$ $+£12.50$ $-£11$ $= £$

b $-£30$ $-£14.30$ $+£22$ $+£13$ $-£2.70$ $= £$

c $£52$ $-£80$ $+£45$ $+£19.50$ $£27$ $= £$

d $-£14$ $-£8$ $-£5.50$ $-£3.20$ $£40$ $= £$

Danny has an overdraft arrangement of £150 with his bank, so his balance can be $-£150$. Copy Danny's bank statement and fill in the missing balances in the final column.

Date	Payment type and details	Paid out	Paid in	Balance
02 Jan	Balance brought forward			-18.90
05 Jan	Shoe shop	£88.50		<input type="text"/>
11 Jan	Pizza	£10.00		<input type="text"/>
16 Jan	Phone bill	£29.97		<input type="text"/>
30 Jan	Wages		£50.00	<input type="text"/>
31 Jan	Birthday cheque		£45.00	<input type="text"/>
31 Jan	Cinema	£12.00		<input type="text"/>
	Balance carried forward			<input type="text"/>

