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6
Gregory lives in a cold country. One morning the temperature is $-4^{\circ} \mathrm{C}$. He puts the central heating on and the temperature goes up by $7^{\circ} \mathrm{C}$.

Later on, he turns the heating off and the temperature goes down by $5^{\circ} \mathrm{C}$. What will the temperature be now?

7
Two hours before the start of a football cup final, there are 23,000 supporters inside the football stadium.

For the next two hours, 1000 supporters arrive every quarter of an hour.
How many supporters will be watching at kick off?

8
Laura writes a sequence. What will be the next number in her sequence?
5112347 ...


9 Jamal is measuring temperature changes.
At $6 p m$ the temperature outside is $5^{\circ} \mathrm{C}$.
If the temperature drops by $2^{\circ} \mathrm{C}$ every hour, what will the
temperature outside be at midnight?

10
Jasmine has to list all the factors of 40 . She discovers only one of these
is both odd and prime.
Which number is it?


11 Which of the numbers below is exactly one hundred thousand less than this number: seven million, four hundred and seventy-five thousand, three hundred and eighty-two?

| A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: |
| $7,375,382$ | $6,475,382$ | $7,465,382$ | $7,474,382$ | $7,375,282$ |



## Decimals

1
Stephen tries to mark the point 0.68 on a number line.


How far away is he from the correct answer?


2
A piece of string is 45 cm long. Kevin cuts off 7.5 cm from one end, and then cuts 2.7 cm from the other end.

How long is the piece of string now?

3
Trey calculates that $0.875+0.398=1.273$.
Which is the correct inverse calculation to check if Trey is right?

| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| :---: | :---: | :---: | :---: | :---: |
| $0.398+0.875$ <br> $=1.273$ | $0.875-0.398$ <br> $=1.273$ | $1.273+0.398$ <br> $=0.875$ | $1.273-0.398$ <br> $=0.875$ | $3.98+8.75$ <br> $=12.73$ |



4
A fence-maker uses planks of wood that are 1.85 m long and 0.15 m wide. He stands them vertically, side by side, so that they are touching.

How long a fence can be made with 200 planks?

5
Information: 1 inch $=2.54 \mathrm{~cm}$
Gemma has three sticks. One is 2 inches long, one is 4 inches and the third is 5 inches.
If she puts the sticks end to end, what will be the total length in cm ?

## Area and perimeter

How many square 50 cm tiles will be needed to tile a kitchen floor measuring 8 metres long and 4 metres wide?

Calculate the area
of the compound shape to the right.


A rectangle has an area of $480 \mathrm{~cm}^{2}$. One of its sides measures 12 cm . What is the perimeter of the rectangle?

| A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: |
| 102 cm | 104 cm | 94 cm | 98 cm | 90 cm |



4
Jules wants to put some new paving slabs on his patio. The paving slabs that Jules has chosen measure 50 cm by 50 cm .
The slabs come in boxes of 24 .
How many boxes will Jules need to buy?


5 What is the combined area of the two triangles below?


## Mixed test 4

1
Joshua sits an exam in which there are 60 questions. Each question is worth 1 mark. Joshua's score in the exam is $55 \%$.
How many questions did Joshua answer incorrectly?
questions

2
Swati bought a t-shirt for $£ 7.20$ and paid with a $£ 10$ note. The cashier in the shop gave
Swati her change in 20 p coins.
How many coins did Swati receive in her change?

| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| :---: | :---: | :---: | :---: | :---: |
| 12 | 15 | 14 | 16 | 8 |



An author publishes a new book on 1st March. The chart shows the sales of the book. How many books are sold in total in the first four days of its publication?


A plane flying from Heathrow to Dubai has 260 passengers on board. On the return flight, there are 20\% fewer passengers.

How many passengers are there on the return flight?
passengers

Nayana buys a large bag of onions weighing 6 kg and an even larger bag of potatoes weighing three times as much as the onions. How much do Nayana's vegetables weigh altogether?

Give your answer in grams.

