## Number grid

Here is a number grid.

| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |

Two squares are shaded.
(a) What is the total of the numbers in the two shaded squares?
(b) Shade two different squares that have the same total as the answer to part (a).
(c) What is the total of the numbers in all four shaded squares?
$\qquad$

## Drinks

A café sells small, medium and large drinks.
The table shows the number of drinks the café sold on one day.

|  | Coffee | Tea | Chocolate |
| :---: | :---: | :---: | :---: |
| Small | 110 | 14 | 24 |
| Medium | 121 | 103 | 42 |
| Large | 90 | 64 | 58 |

(a) Altogether, how many chocolate drinks were sold?
(b) A small tea costs 50p.

Altogether, how much was spent on small teas?


## True or false

Look at the number sentences below.
Tick $\left(\boldsymbol{V}^{\prime}\right)$ ones that are correct and cross $(\boldsymbol{X})$ ones that are incorrect.

|  |
| :--- |
| $\qquad$$5+8=8+5$  <br> $5-8=8-5$  <br> $5 \times 8=8 \times 5$  <br> $5 \div 8=8 \div 5$  |

## Missing numbers

Write the missing numbers in the boxes.

4. $36+\square=90$

5 Halfway
(a) What number is halfway between -2 and 6?
$\qquad$
(b) Complete the sentence.

## Balancing

2 tins balance 1 bottle.


1 tin and 1 bottle balance 1 box.

(a) How many bottles do 6 tins balance?
$\qquad$
(b) How many boxes do 6 tins balance?
$\qquad$

## UK population

In 2005, about 60.2 million people lived in the UK.
Look at the information about these people.

- $\quad 50.4$ million lived in England.

■ $\quad 5.1$ million lived in Scotland.

- 3 million lived in Wales.
- The rest lived in Northern Ireland.
(a) In 2005, about how many people lived in Northern Ireland?

(b) In 2005, about what percentage of people in the UK lived in Wales?

Tick $\left(v^{\prime}\right)$ the correct value.


## Calculations

Write the missing numbers.


$$
\text { \& ........... }-403=982
$$

## Open garden

People pay to visit a garden.

| Tickets: |  |
| :--- | :--- |
| Age 16 and over | $£ 3.60$ |
| Under 16 | $£ 2.25$ |

145 people pay.
39 of them are under 16
How much ticket money is paid altogether?
$\square$
£

## School uniform

A shop sells school uniform.

| Two shirts and one jumper cost £29 |
| :--- |
| One shirt and one jumper cost £21 |

How much does one jumper cost?

## Radio

Two websites sell the same type of radio.

|  | Website A | Website B |
| :---: | :---: | :---: |
| Cost of radio | $£ 79.99$ | $£ 76.76$ |
| Cost of postage | $£ 3.49$ | $£ 6.79$ |

Sunil is going to buy the radio from one of the websites.
He also has to pay for postage.
Which website is cheaper and by how much?

Scale balance
The numbers on these scales balance.


Write the missing number so that these scales balance.


## 13 Two digits

Here are four digit cards.


Show all the different two-digit numbers that are bigger than $\mathbf{3 0}$ that you can make using these cards.

You can use the cards more than once.

## Doubling

(a) I think of a number.

I double my number and the answer is 178
What is my number?
(b) I think of a different number.

I double my number, then I double again.
The answer is $\mathbf{3 1 2}$

What is my number?
$\qquad$

15 Beads
A bag contains coloured beads.
The table shows numbers and fractions of each colour.
Write the missing numbers and fractions in the table.


| Colour | Number of beads | Fraction |
| :---: | :---: | :---: |
| Blue | 12 |  |
| Red |  | $\frac{1}{12}$ |
| Green | 4 | $\frac{1}{4}$ |
| Other |  |  |

## 16 Doing and undoing

Write the missing fractions.
The first one is done for you, with diagrams to help.
For any number, $x$

Add half the number


Then subtract one third of the result.

The answer is $x$


For any number, $y$
Add one third of the number
(v. Then subtract $\qquad$ of the result.

The answer is $y$

For any number, $t$
Add two thirds of the number
(i. Then subtract $\qquad$ of the result.

The answer is $t$

## Add to 8

Complete this diagram so that the three numbers in each line add to 8


## 18 Doing and undoing

Write the missing fractions.
The first one is done for you, with diagrams to help.
For any number, $x$

Add half the number


Then subtract $\qquad$ of the result.

The answer is $x$

For any number, $y$
Add one third of the number
(4. Then subtract $\qquad$ of the result.

The answer is $y$

