# SMILE WORKCARDS

## Number and Algebra Mixed Pack One

Contents

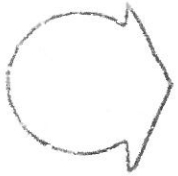

| | Title | Card Number |
|---|---|---|
| 1 | Bounce | 1430 |
| 2 | Money | 1381 |
| 3 | Sum Message w/s | 2213 |
| 4 | Cafe Menu | 2233 |
| 5 | Puzzle w/s | 869 |
| 6 | Find the Route w/s | 2262 |
| 7 | Wildlife Collection | 2225 |
| 8 | A Number of Things | 1353 |
| 9 | Number Stories | 2399 |
| 10 | Cross Puzzles w/8 | 705 |
| 11 | The Key to Success w/s | 1635 |
| 12 | Crossword w/s | 1813 |
| 13 | Plus and Minus Grids w/s | 2264 |
| 14 | Sum & Product w/s | 74 |
| 15 | Sum & Product Again w/s | 99 |
| 16 | Shajjad's Collection | 2224 |
| 17 | Calculator Flags w/s | 1636 |

# BOUNCE

You will need counters and a dice.

Throw the dice.

First person to reach 100 wins.



Bounce on 10

Bounce back 10

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| START 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 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 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

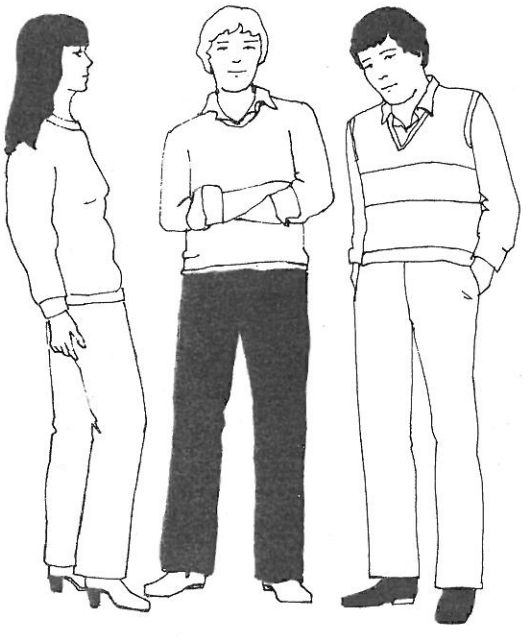
Smile 1381

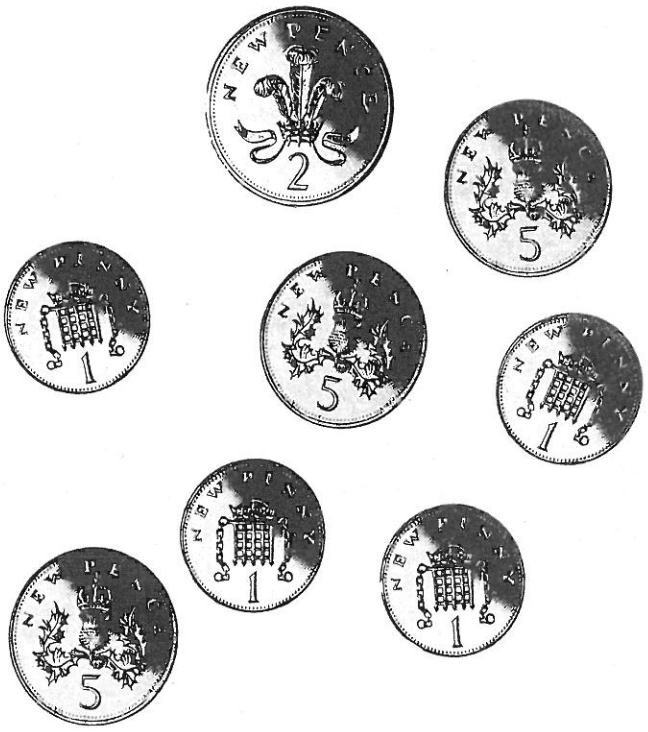
# Money

You will need the box of money. *Put the money in piles.*

1. How much is 4 times this?

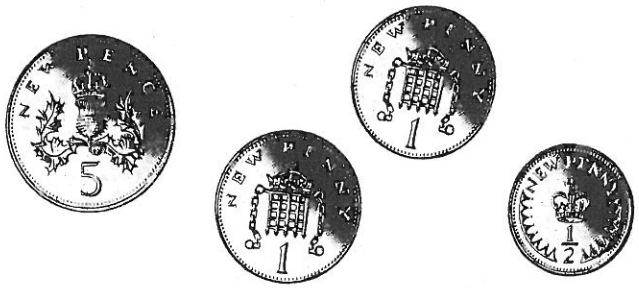
2. How much for each person?



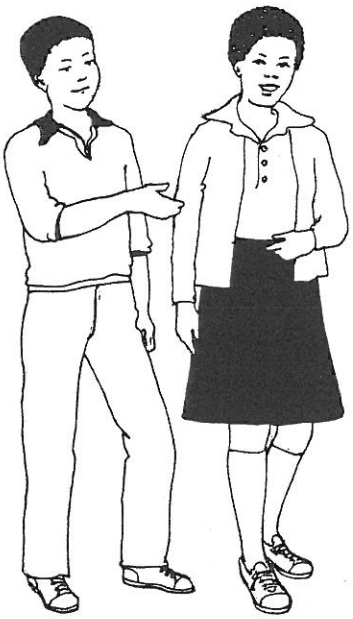


3. How much more is needed to make 50p?

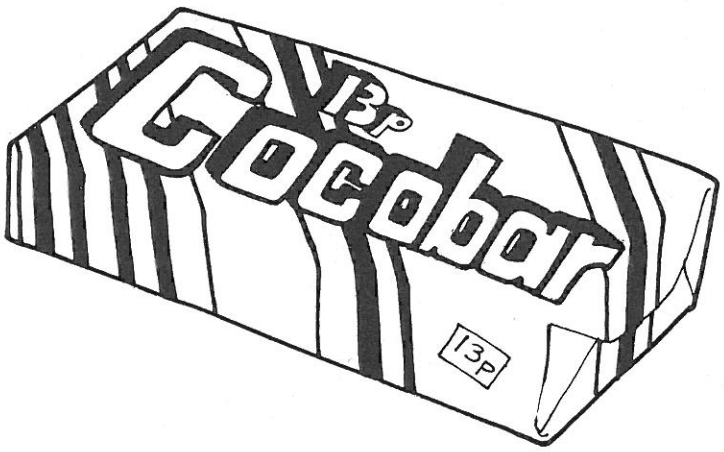
4. How much is 5 times this?



5. How much for each person?

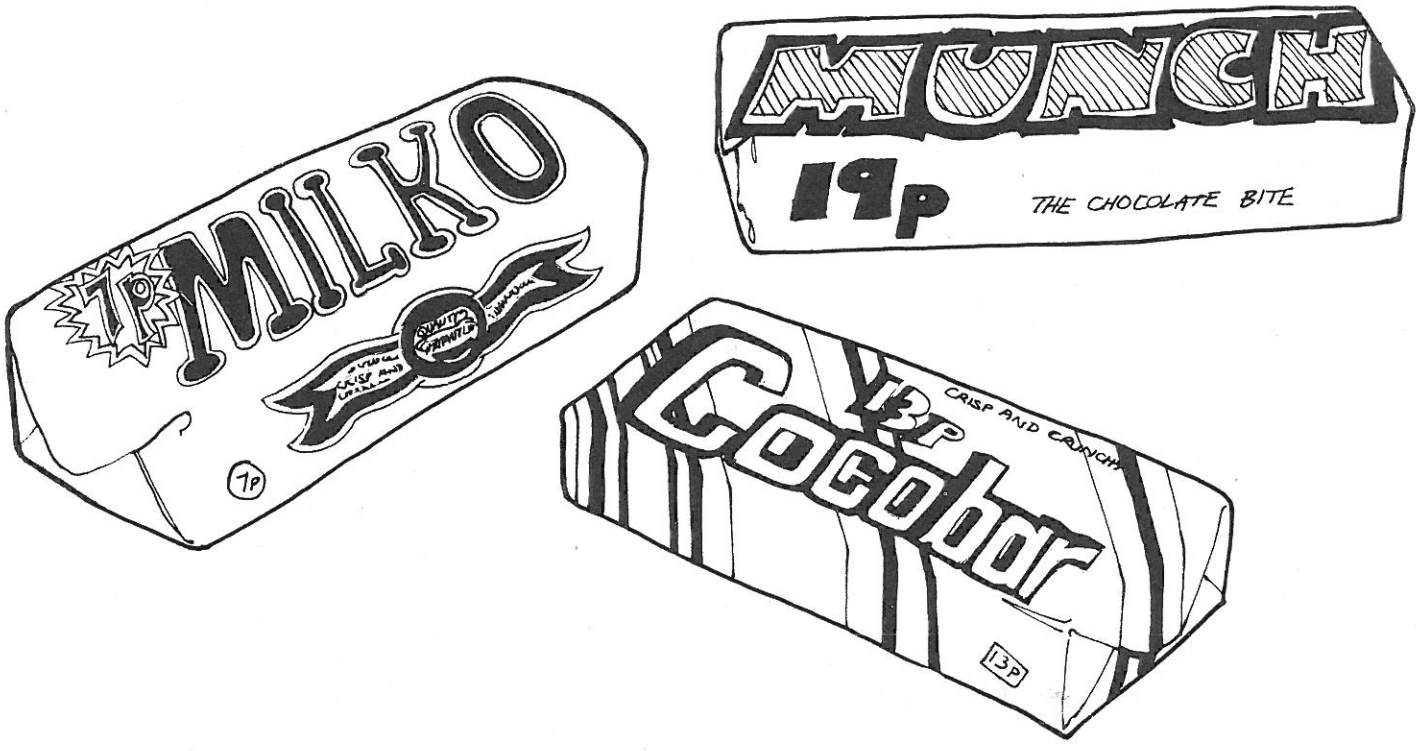


6. (a) How much for 4 bars?
   (b) How much change from £1?

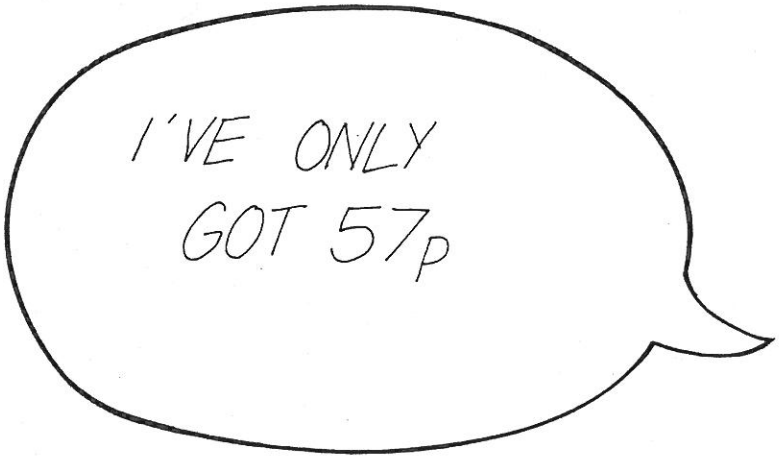


7. How much more does the can cost?

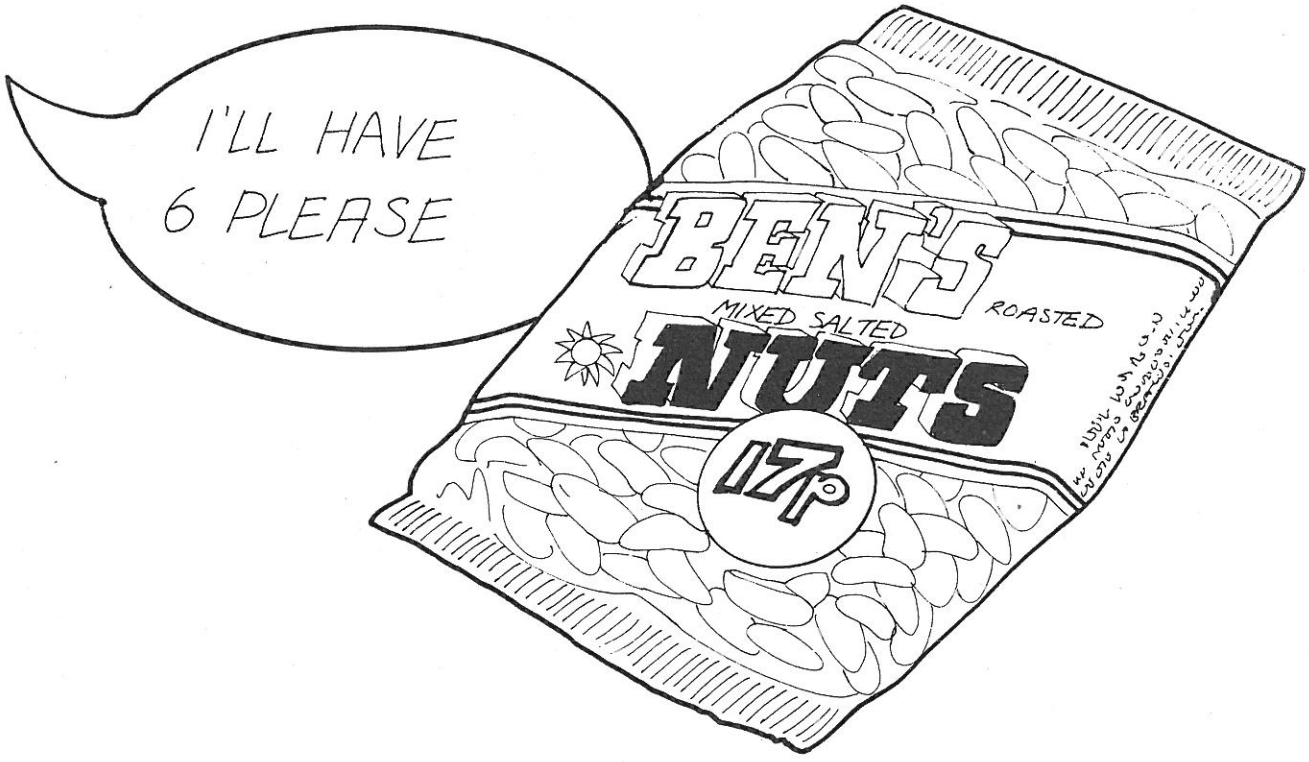
8. What is the total cost?



9. How much more do I need?




10. Is £1 enough?



# Sum Messages

Shade in the boxes where the answer is the target number.

target **12**

| | | |
|---|---|---|
| 4 x 3 | 7 + 5 | 6 + 6 |
| 8 + 5 | 19 – 7 | 20 – 5 |
| 4 x 4 | 3 + 9 | 7 + 7 |
| 23 – 7 | 24 ÷ 2 | 6 x 3 |
| 30 – 16 | 17 – 5 | 22 – 8 |

target **4**

| | | |
|---|---|---|
| 23 – 19 | 6 – 2 | 40 ÷ 10 |
| 2 x 2 | 3 + 3 | 6 – 2 |
| 24 ÷ 6 | 5 – 2 | 20 – 16 |
| 3 + 1 | 12 ÷ 2 | 8 ÷ 2 |
| 4 x 1 | 12 ÷ 3 | 7 – 3 |

target **7**

| | | |
|---|---|---|
| 2 + 5 | 7 x 1 | 10 – 3 |
| 14 ÷ 2 | 15 ÷ 3 | 21 ÷ 3 |
| 12 – 5 | 5 + 2 | 3 + 4 |
| 20 – 13 | 20 – 12 | 15 – 9 |
| 6 + 1 | 6 x 1 | 10 – 4 |

The word is ____ ____ ____

target **8**

| | | |
|---|---|---|
| 16 ÷ 2 | 4 + 4 | 11 – 3 |
| 8 x 1 | 11 – 4 | 24 ÷ 3 |
| 15 – 7 | 17 – 9 | 2 x 4 |
| 6 + 2 | 3 x 3 | 20 – 12 |
| 14 – 6 | 14 – 7 | 5 + 3 |

target **10**

| | | |
|---|---|---|
| 7 + 3 | 9 + 1 | 2 x 5 |
| 23 – 13 | 4 + 4 | 4 + 5 |
| 2 + 8 | 11 – 4 | 3 x 2 |
| 5 + 5 | 3 x 3 | 23 – 7 |
| 11 – 1 | 13 – 3 | 4 + 6 |

target **3**

| | | |
|---|---|---|
| 6 ÷ 2 | 11 – 8 | 12 ÷ 4 |
| 7 – 4 | 11 – 4 | 5 – 3 |
| 24 – 21 | 8 – 5 | 2 x 1 |
| 9 ÷ 3 | 1 + 3 | 12 ÷ 3 |
| 12 – 9 | 5 – 2 | 20 – 17 |

The word is ____ ____ ____

Make up a grid for the first letter of your name.

You will need Smile **2233a**

**CAFE MENU**

Smile Worksheet **2233**

- Find the prices from the CAFE MENU and add up each person's bill.

**Tariq**

Vegetable Bake £2 · 30

Ice Cream £1 · 25

Orange Juice £0 · 60

CAFE MENU **Total** £4 · 15

**Flora**

Cheese Salad .....

Tea .....

Lemon Pancake .....

CAFE MENU **Total** .....

**Neil**

Chicken Curry and Rice .....

Fruit Salad .....

Tropical Juice .....

CAFE MENU **Total** .....

**Mai Ling**

Salad Bar .....

Fruit Salad .....

Orange Juice .....

CAFE MENU **Total** .....

**Saskia**

Vegetarian Pizza .....

Ice Cream .....

Orange Juice .....

CAFE MENU **Total** .....

**George**

Baked Potato and Tuna .....

Lemon Pancake .....

Apple Juice .....

CAFE MENU **Total** .....

**Each person gives a £10 note to pay their bill.**

- Work out how much change each person will get.

**Tariq**

£10 · 00

Total £4 · 15

Change £5 · 85

**Flora**

£10 · 00

Total .....

Change .....

**Neil**

£10 · 00

Total .....

Change .....

**Mai Ling**

£10 · 00

Total .....

Change .....

**Saskia**

£10 · 00

Total .....

Change .....

**George**

£10 · 00

Total .....

Change .....

Smile 2233a

# CAFE MENU

## Food

### Main Courses

Vegetable Bake ..... £2·30

Cheese Salad ..... £2·00

Salad Bar ..... £2·50

Chicken Curry and Rice ..... £3·15

Ham and Mushroom Pizza ... £3·90

Vegetarian Pizza ..... £3·70

Baked Potato and Tuna ..... £2·10

### Puddings

Ice Cream ..... £1·25

Fruit Salad ..... £1·40

Lemon Pancake ..... £2·00

## Drinks

Orange Juice. ..... £0·60

Apple Juice. ..... £0·60

Tropical Juice. ..... £0·70

Mineral Water ..... £0·50

Tea. ..... £0·45

Cola. ..... £0·65

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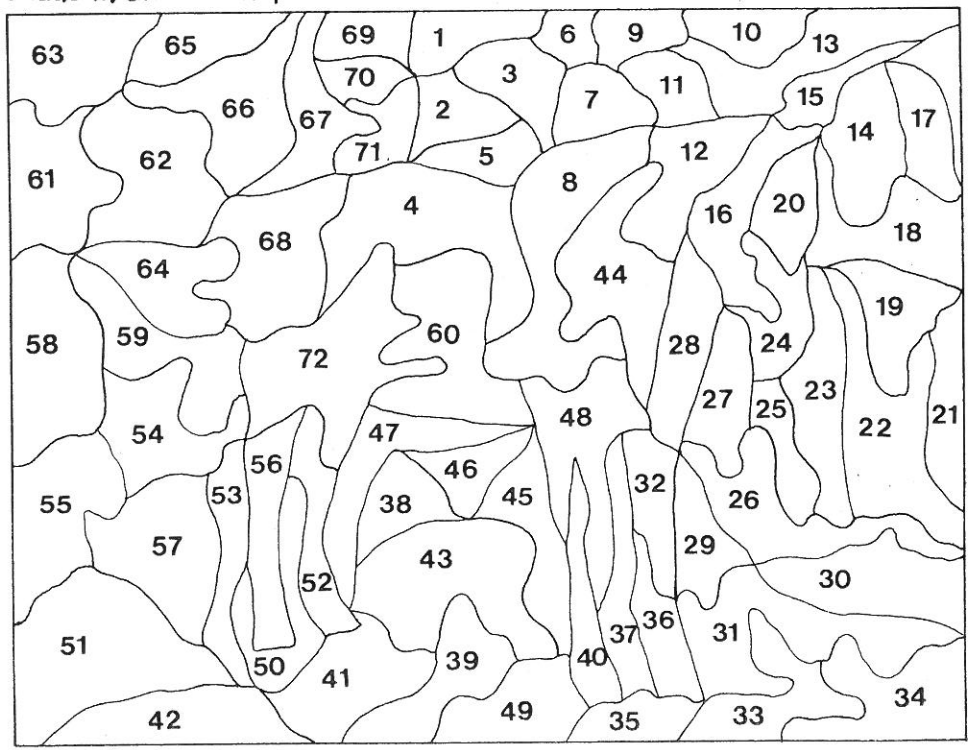
# Puzzle Worksheet

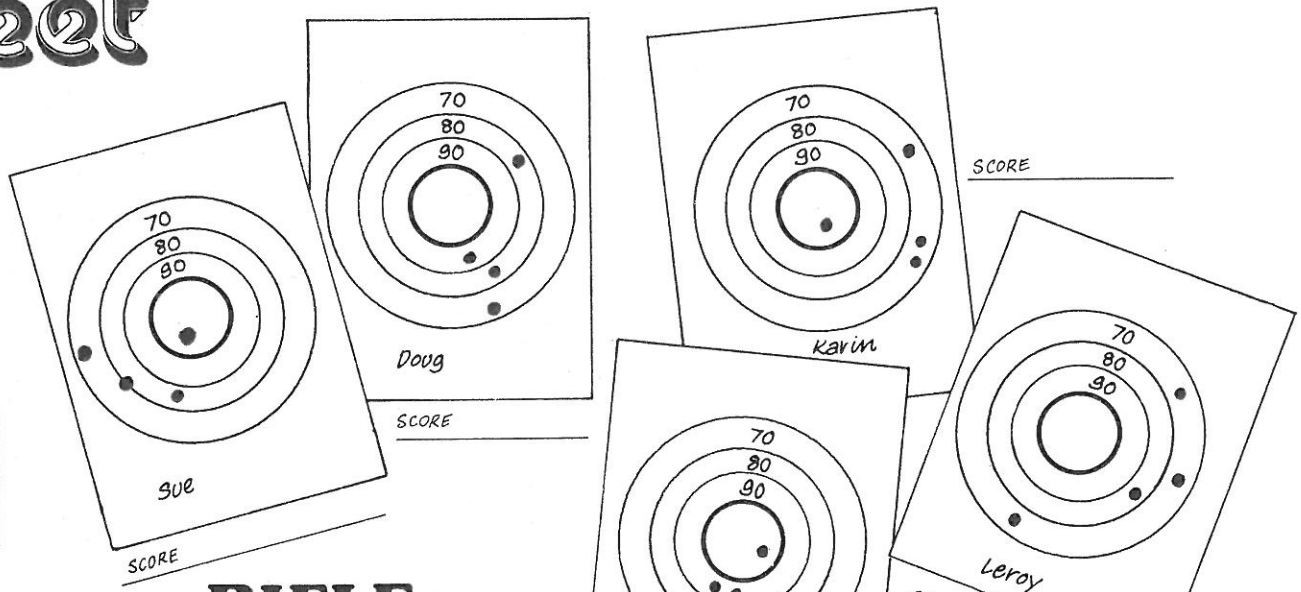
## How many scramble?

TANDOUSH 1000 ERUNDDH___
NET___ INTHEGEE___ TOW___
ENO_WYTENT_ EISNEXT___

## Hidden Picture

*Shade in all the shapes whose numbers are multiples of 4*

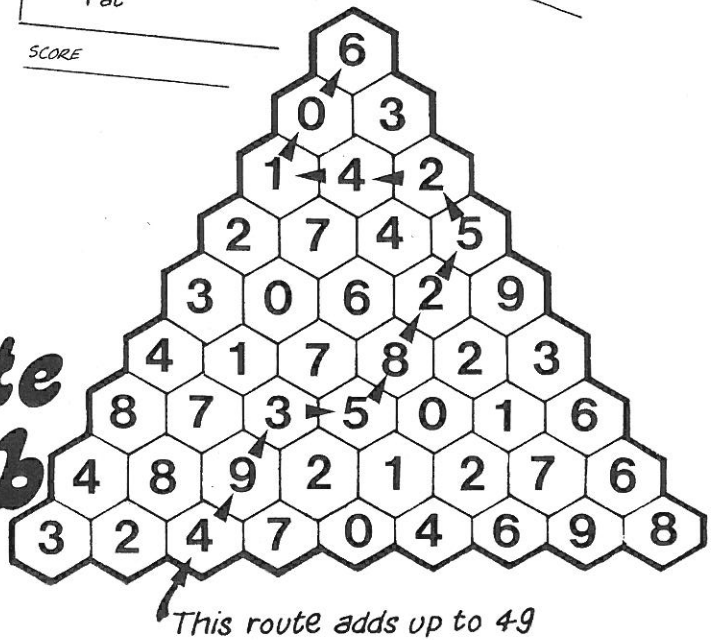



## RIFLE RANGE

*Five people's score cards – who won?*

## Route climb




*This route adds up to 49*

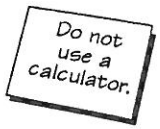
*4 + 9 + 3 + 5 + 8 + 2 + 5 + 2 + 4 + 0 + 6 = 49*

*Find a route which adds up to 41.*

# Find the route

Start at Start and find your way to the End

- You can only go into the squares where the answer is **10** or **24**.




- Colour in your route as you go along.
- You can only move left ← right → or up ↑ down ↓

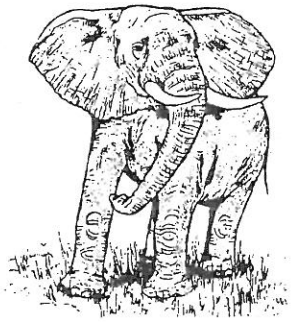
Start

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2 + 2 | 3 x 4 | 11 – 3 | 12 x 7 | 7 + 3 | 8 + 1 | 5 + 2 | 3 + 6 | 9 – 6 |
| 1 + 5 | 10 ÷ 2 | 9 + 6 | 7 + 5 | 6 + 4 | 11 – 1 | 8 x 3 | 2 x 12 | 3 x 3 |
| 11 – 1 | 20 ÷ 2 | 5 x 2 | 2 + 14 | 5 ÷ 5 | 4 + 5 | 6 x 5 | 9 + 1 | 12 – 0 |
| 3 + 7 | 11 x 1 | 26 – 2 | 20 + 4 | 6 x 4 | 4 + 4 | 7 + 14 | 6 x 4 | 10 x 0 |
| 1 + 9 | 15 – 5 | 9 + 2 | 18 – 6 | 12 +12 | 8 + 2 | 10 + 0 | 4 x 6 | 23 + 2 |
| 3 + 11 | 12 x 2 | 13 – 3 | 5 + 5 | 6 ÷ 3 | 7 + 6 | 8 x 1 | 3 + 6 | 7 + 7 |
| 5 + 3 | 7 + 2 | 9 x 3 | 3 x 8 | 10 + 0 | 10 x 0 | 9 + 4 | 4 + 3 | 3 x 9 |
| 4 + 0 | 10 x 10 | 8 + 1 | 4 ÷ 4 | 28 – 4 | 3 + 2 | 2 x 6 | 13 – 4 | 18 ÷ 9 |

End

# Wildlife Collection

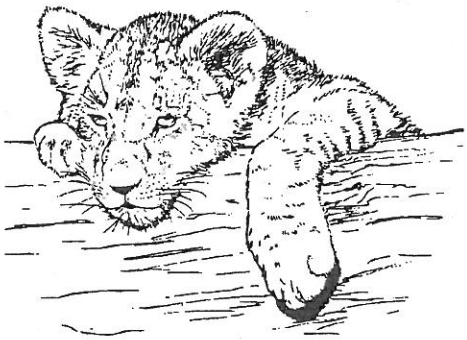
You will need: Smile worksheet **2225a**
and the box of coins.



Louise collected money for a wildlife charity from three classes.

To help count the money she puts the coins into piles.

She records the amounts collected from each class on a school **Paying-in slip**.



**School Bank** — **Paying-in slip**

**Class**

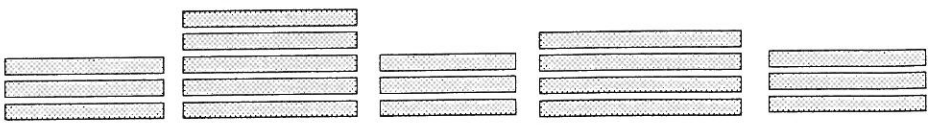
Date _____

Paid in by

_____

| Coins | Number in pile | Amount £ | Amount p |
|---|---|---|---|
| £1 | | | |
| 50p | | | |
| 20p | | | |
| 10p | | | |
| 5p | | | |
| 2p | | | |
| 1p | | | |
| **Total Amount** | | | |

This is what Louise collected from **Class 1**.

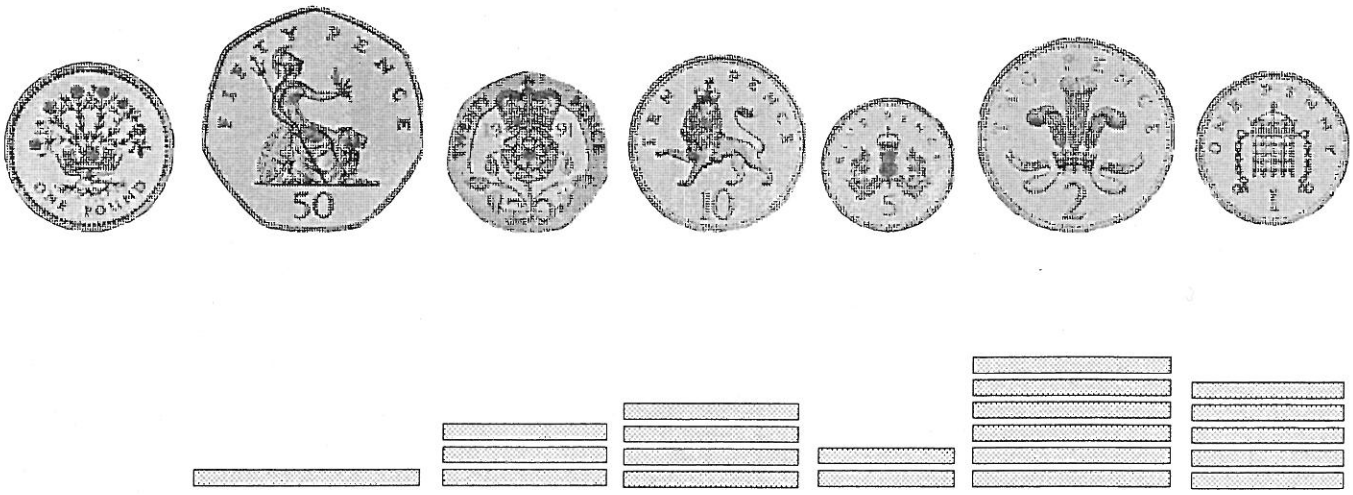


0 coins 0 coins 3 coins 5 coins 3 coins 4 coins 3 coins

**On the worksheet**

- Complete the Paying-in slip for the coins which Louise collected from **Class 1**.
  There are three 20p coins. 20p x 3 = 60p. This row has been filled in.
- Make sure that the Total Amount is correct. (Remember 100 pence is £1.00.)

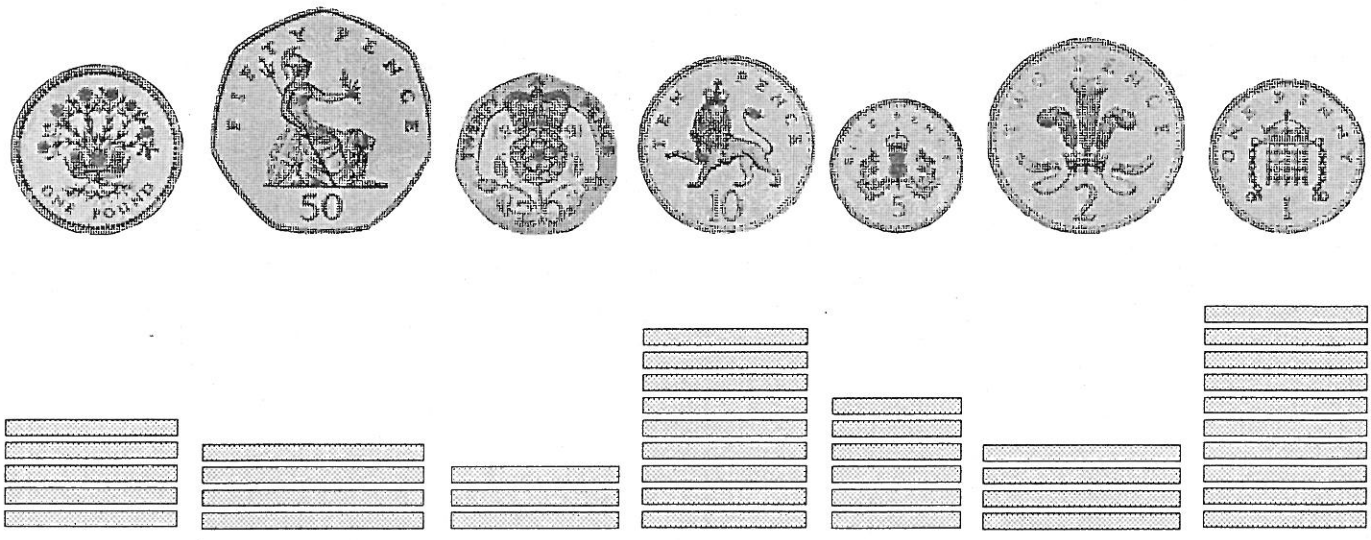
This is what Louise collected from **Class 2**.



**On the worksheet**

- Complete the Paying-in slip for the coins which Louise collected from **Class 2**.
- Make sure that the Total Amount is correct.

This is what Louise collected from **Class 3**.



**On the worksheet**

- Complete the Paying-in slip for the coins which Louise collected from **Class 3**.
- Fill in the Total Amount.

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## School Bank

### Paying-in slip

**Class 1**

Date _____

Paid in by

Louise

| Coins | Number in pile | Amount £ | Amount p |
|---|---|---|---|
| £1 | | | |
| 50p | | | |
| 20p | 3 | | 60 |
| 10p | | | |
| 5p | | | |
| 2p | | | |
| 1p | | | |
| **Total Amount** | | 1 | 36 |

## School Bank

### Paying-in slip

**Class 2**

Date _____

Paid in by

Louise

| Coins | Number in pile | Amount £ | Amount p |
|---|---|---|---|
| £1 | | | |
| 50p | | | |
| 20p | | | |
| 10p | | | |
| 5p | | | |
| 2p | | | |
| 1p | | | |
| **Total Amount** | | 1 | 77 |

## School Bank

### Paying-in slip

**Class 3**

Date _____

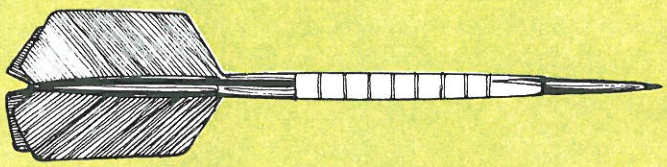
Paid in by

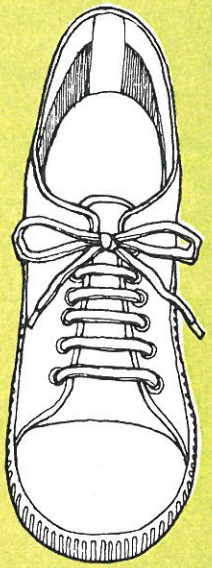
Louise

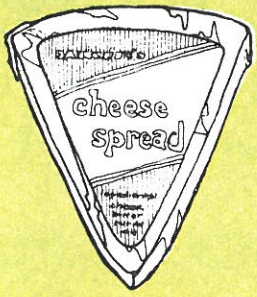
| Coins | Number in pile | Amount £ | Amount p |
|---|---|---|---|
| £1 | | | |
| 50p | | | |
| 20p | | | |
| 10p | | | |
| 5p | | | |
| 2p | | | |
| 1p | | | |
| **Total Amount** | | | |

Smile 1353

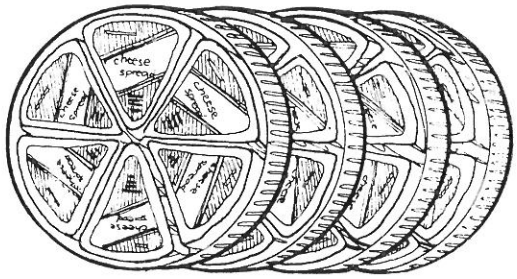
# A NUMBER OF THINGS





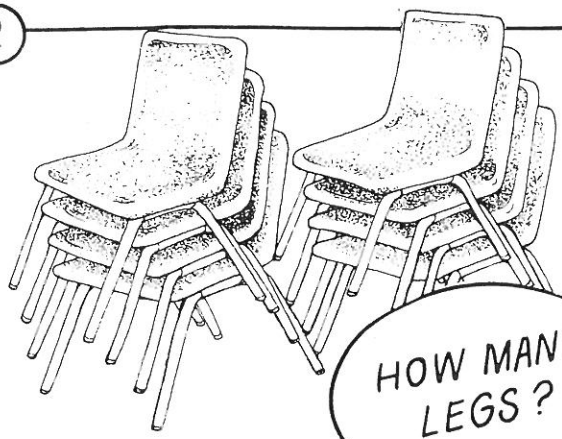


1



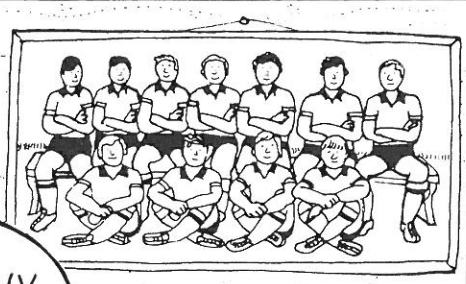

HOW MANY PORTIONS OF CHEESE?

2



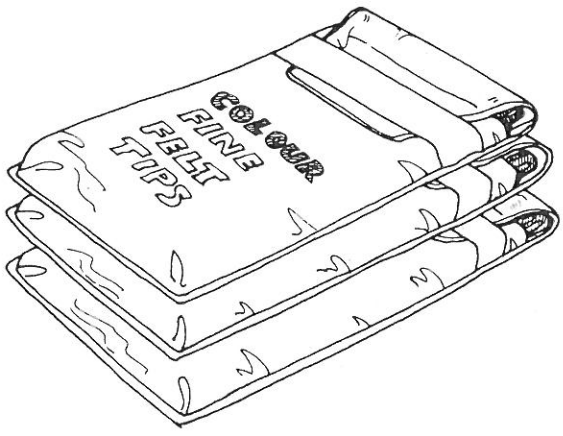
HOW MANY LEGS?

3



HOW MANY LEGS?

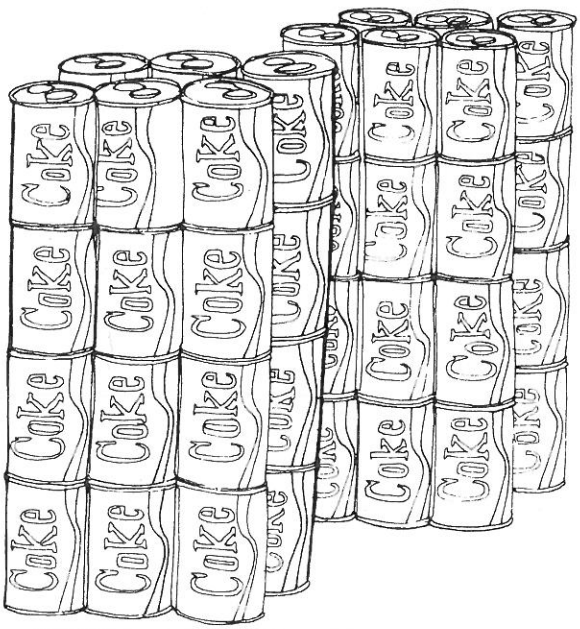
4



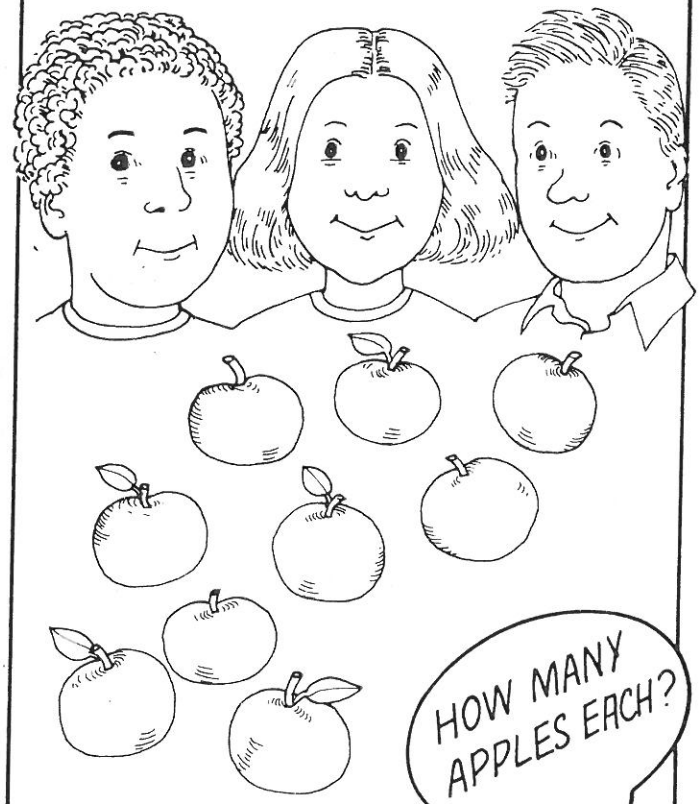

15 FELT TIPS ALTOGETHER. HOW MANY IN EACH PACK?

5

HOW MANY CANS OF COKE?

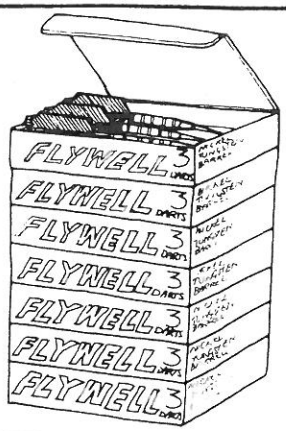


6



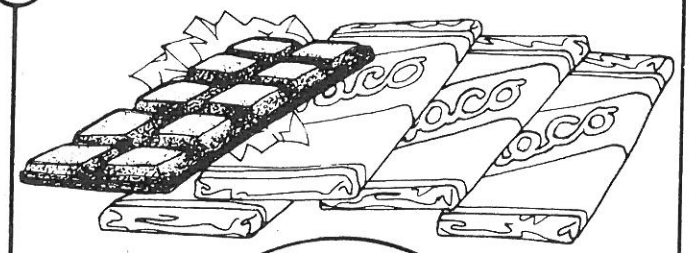
HOW MANY APPLES EACH?

7



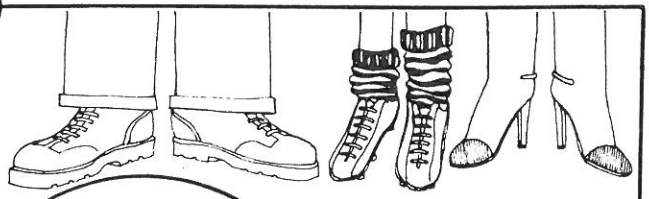

HOW MANY DARTS?

8



HOW MANY SQUARES OF CHOCOLATE?

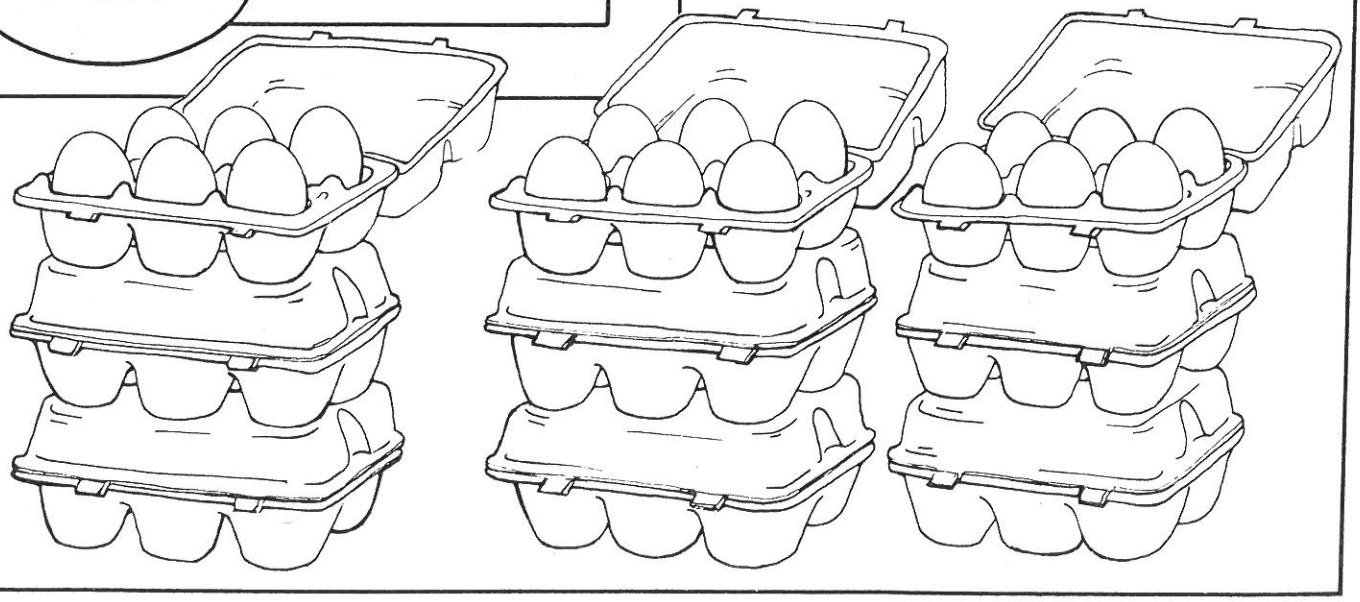
9



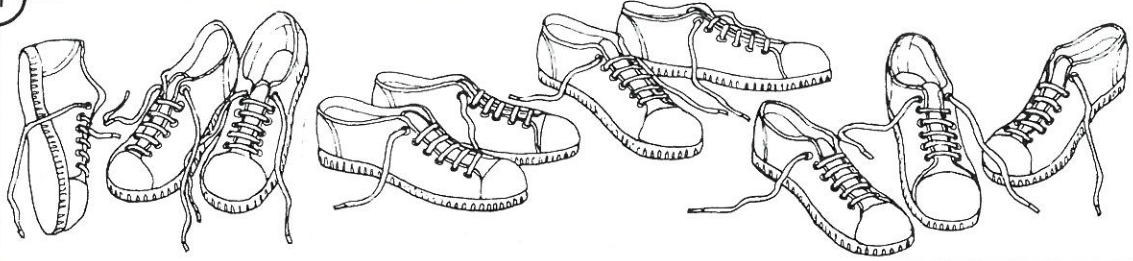
HOW MANY TOES?

10

HOW MANY EGGS?



11

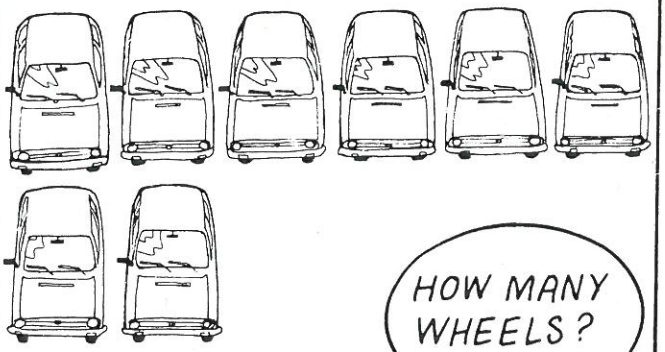


HOW MANY PLAYERS?

12

HOW MANY BUTTONS?

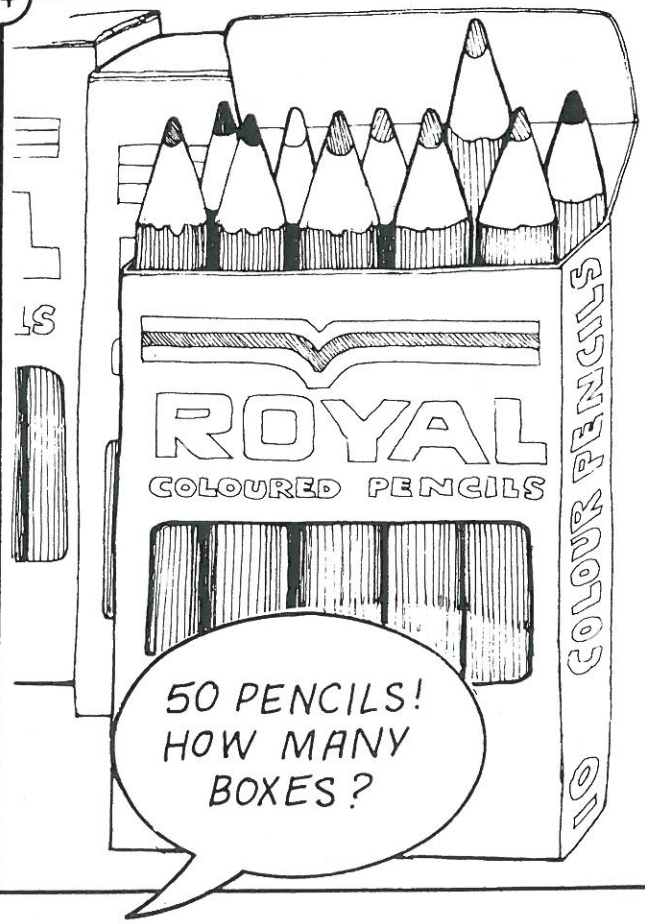
13



HOW MANY WHEELS?

TURN OVER

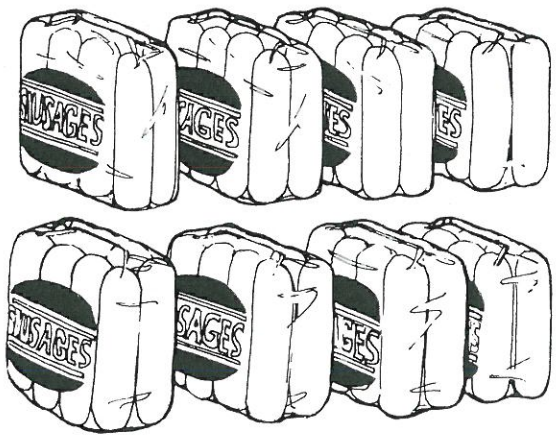
14




50 PENCILS! HOW MANY BOXES?

15

HOW MANY SAUSAGES?



# Number Stories

**Here is a calculation.**

**7 + 2 – 6**

**Here is its story:**

**I had seven marbles. Then I won two more marbles. Then I lost six marbles.**
**7 + 2 – 6**

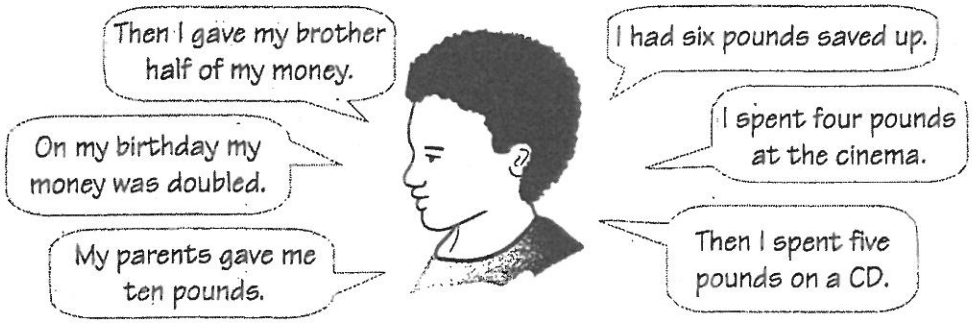
1. Here are two other calculations.

**8 – 5 + 2** **6 + 5 – 4**

Use the sentences below to make a number story for each calculation.
Write them down in your book.

2. Here are two more calculations. Use the sentences below to make a number story for each calculation. Write them down in your book.

**6 × 2 – 5** **10 ÷ 2 – 4**




3. Make up number stories for each of these calculations and show them to your teacher.

**8 – 3 + 7** **4 × 3 + 6**

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# Cross Puzzles

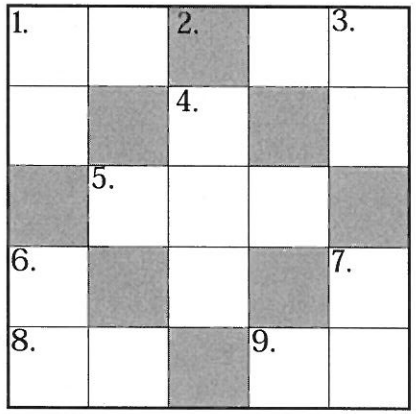
Use the clues to solve these two cross puzzles.

### Clues across

1. 20 – 3
2. 1 + 3 + 5 + 7 + 9
5. Two hundred and sixty-four
8. One less than 70
9. 10 x 10 – 1

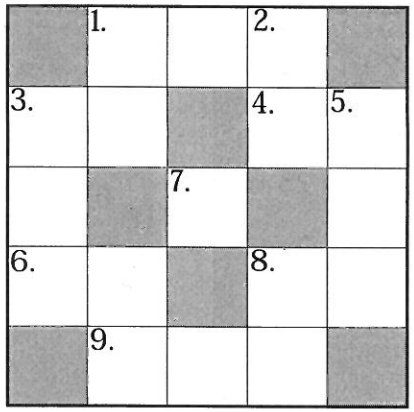
### Clues down

1. Number of hours from midnight to noon.
3. Half of a hundred.
4. 188 + 100 + 78
6. 2 x 2 x 2 x 2
7. 7 x 7



### Clues across

1. 100 + 10 + 1
3. Number of hours in one day.
4. 2 x 2 x 2 x 2 x 2
6. Half of 10
7. 6 x 10
8. 3 x 3 x 3
9. 110 – 5

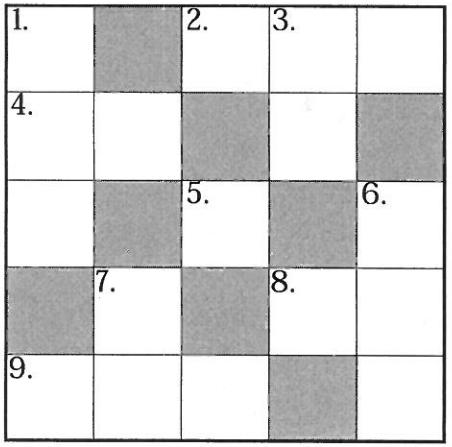


### Clues down

1. 8 + 6
2. $6\frac{1}{2}$ x 2
3. 6 x 6 x 6
5. 3 less than 300
8. 9 + 7 + 5 + 3 + 1

---

Use the grid below to invent a cross puzzle of your own.



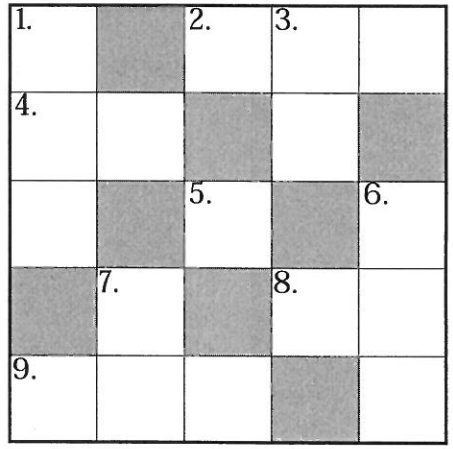
Write the clues and give it to someone else to solve.

### Clues across

1. _____
2. _____
4. _____
8. _____
9. _____

### Clues down

1. _____
3. _____
5. _____
6. _____
7. _____



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# The Key to Success

Use these keys only

[ − ] [ + ] [ × ] [ = ]

[ 2 ] [ 3 ] [ 8 ]

in any order.

| | |
|---|---|
| 3 − 2 = | 1 |
| 2 + 2 = | 4 |
| | 5 |
| | 6 |
| | 10 |
| | 11 |
| | 16 |
| | 24 |

Use these keys only

[ − ] [ + ] [ × ] [ = ]

[ 3 ] [ 5 ] [ 9 ]

in any order.

| | |
|---|---|
| | 0 |
| | 4 |
| | 8 |
| | 12 |
| | 14 |
| | 15 |
| | 27 |
| | 45 |

Use these keys only

[ − ] [ + ] [ × ] [ = ]

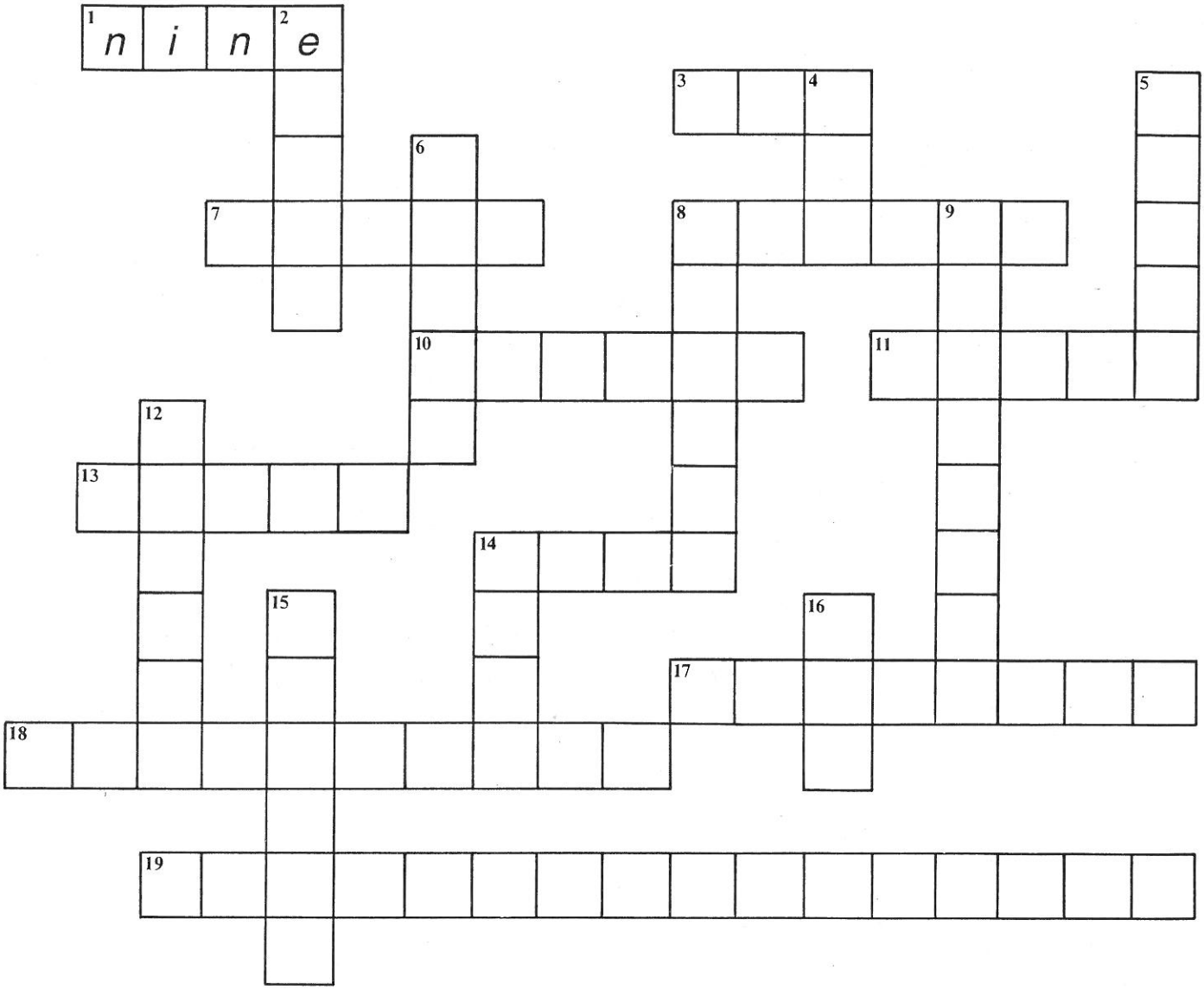
[ 3 ] [ 6 ] [ 7 ]

in any order.

| | |
|---|---|
| | 9 |
| | 1 |
| | 12 |
| | 13 |
| | 18 |
| | 21 |
| | 36 |
| | 42 |

# Crossword






## Across

1. Three times three
3. One pair
7. Take away seventeen from twenty
8. Four times five
10. 33 ÷ 3
11. Twelve fives
13. Double 25
14. Half of ten
17. △
18. Centimetres in a metre (two words)
19. 30mm (two words)

## Down

2. Sixteen divided by two
4. One less than two
5. Eight times five
6. The number of days in a week
8. One dozen
9. Twenty minus seven
12. ●
14. 7 + 9 − 3 + 10 − 20 + 1
15. □
16. Four plus two

# Plus and Minus Grids

In this grid there are **3 additions** and **2 subtractions**.

| | | | | |
|---|---|---|---|---|
| 3 | 8 | 7 | 2 | 5 |
| 9 | 4 | 1 | 5 | 6 |
| 12 | 0 | 5 | 2 | 3 |

$3 + 9 = 12$
$7 - 2 = 5$
$4 + 1 = 5$
$1 + 5 = 6$
$5 - 2 = 3$

In the following two grids, draw rings around sets of three numbers to make additions and subtractions. You can go across → or down ↓

**1.** This one has **5 additions** and **2 subtractions**.

| | | | | |
|---|---|---|---|---|
| 4 | 2 | 7 | 9 | 6 |
| 3 | 8 | 2 | 1 | 7 |
| 3 | 5 | 9 | 10 | 13 |
| 6 | 3 | 6 | 1 | 5 |

☐ + ☐ = ☐
☐ + ☐ = ☐
☐ + ☐ = ☐
☐ + ☐ = ☐
☐ + ☐ = ☐
☐ − ☐ = ☐
☐ − ☐ = ☐

**2.** This one has **4 additions** and **3 subtractions**.

| | | | | | |
|---|---|---|---|---|---|
| 6 | 0 | 9 | 3 | 2 | 1 |
| 5 | 4 | 8 | 12 | 6 | 15 |
| 1 | 3 | 11 | 2 | 7 | 8 |
| 3 | 6 | 0 | 8 | 13 | 7 |
| 0 | 4 | 4 | 10 | 2 | 4 |

☐ + ☐ = ☐
☐ + ☐ = ☐
☐ + ☐ = ☐
☐ + ☐ = ☐
☐ − ☐ = ☐
☐ − ☐ = ☐
☐ − ☐ = ☐

**3.** Fill in this grid to make your own puzzle.

| | | | | |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

This one has ☐ **additions** and ☐ **subtractions**.

- Copy the grid and ask somebody to find the additions and subtractions.

# Sum and Product

To find the **sum** we add e.g. $2 + 5 = 7$
To find the **product** we multiply e.g. $2 \times 5 = 10$

| | | **sum** | **product** |
|---|---|---|---|
| 6 | 5 | 11 | 30 |
| 7 | 3 | | |
| 2 | 9 | | |
| 4 | 8 | | |
| 5 | 6 | | |
| 3 | 7 | | |
| 8 | 8 | | |
| 10 | 11 | | |
| 9 | 4 | | |
| 4 | 11 | | |
| 6 | 8 | | |
| 9 | 7 | | |
| 12 | 12 | | |
| 8 | 9 | | |
| 11 | 12 | | |

# Sum and Product Again

To find the **sum** we add e.g. $5 + 3 = 8$
To find the **product** we multiply e.g. $5 \times 3 = 15$

| | | sum | product |
|---|---|---|---|
| 3 | 4 | 7 | 12 |
| 4 | 5 | | |
| 5 | 6 | | |
| 6 | 7 | | |
| 7 | 6 | | |
| 8 | 5 | | |
| 9 | 4 | | |
| 10 | 3 | | |
| 11 | 2 | | |
| 12 | 5 | | |
| 10 | 11 | | |
| 9 | 8 | | |
| 8 | 8 | | |
| 7 | 12 | | |
| 11 | 11 | | |

# Shajjad's collection

You will need worksheet **2224a**.

Shajjad put a collection box for a charity in his classroom for one week.
At the end of each day he sat down with his teacher to see how much money had been collected.
This is what they found at the end of each day.

| | £1 coins | 50p coins | 20p coins | 10p coins | 5p coins | 2p coins | 1p coins |
|---|---|---|---|---|---|---|---|
| Monday | | | | | | | |
| Tuesday | | | | | | | |
| Wednesday | | | | | | | |
| Thursday | | | | | | | |
| Friday | | | | | | | |

- Fill in the amounts for each day's collection using the Paying-in slips on worksheet **2224a**. Monday's has been started.

**Look at the Paying-in slips you have completed on the worksheet.**

1. Copy this table.
   Fill in the amounts collected by Shajjad on each day.

   Work out the total amount that he collected for one week.

| Day | Amount collected |
|---|---|
| Monday | £4.72 |
| Tuesday | £2.74 |
| Wednesday | |
| Thursday | |
| Friday | |
| Total for one week. | |

2. On which day did Shajjad collect most money?
3. On which day did Shajjad collect least money?
4. How much more money did Shajjad collect on Friday than on Wednesday?
5. On which days did Shajjad collect more than £3.50?

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School Bank
**Paying-slip**

**Monday**

Paid in by *Shajjad*

| Coins | Number in pile | Amount £ | Amount p |
|---|---|---|---|
| £1 | 1 | 1 | 00 |
| 50p | 5 | 2 | 50 |
| 20p | | | |
| 10p | | | |
| 5p | | | |
| 2p | | | |
| 1p | | | |
| | **Total Amount** | 4 | 72 |

School Bank
**Paying-slip**

**Tuesday**

Paid in by *Shajjad*

| Coins | Number in pile | Amount £ | Amount p |
|---|---|---|---|
| £1 | | | |
| 50p | | | |
| 20p | | | |
| 10p | | | |
| 5p | | | |
| 2p | | | |
| 1p | | | |
| | **Total Amount** | 2 | 74 |

School Bank
**Paying-slip**

**Wednesday**

Paid in by *Shajjad*

| Coins | Number in pile | Amount £ | Amount p |
|---|---|---|---|
| £1 | | | |
| 50p | | | |
| 20p | | | |
| 10p | | | |
| 5p | | | |
| 2p | | | |
| 1p | | | |
| | **Total Amount** | | |

School Bank
**Paying-slip**

**Thursday**

Paid in by *Shajjad*

| Coins | Number in pile | Amount £ | Amount p |
|---|---|---|---|
| £1 | | | |
| 50p | | | |
| 20p | | | |
| 10p | | | |
| 5p | | | |
| 2p | | | |
| 1p | | | |
| | **Total Amount** | | |

School Bank
**Paying-slip**

**Friday**

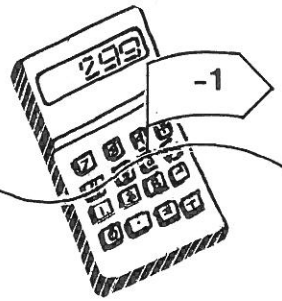
Paid in by *Shajjad*

| Coins | Number in pile | Amount £ | Amount p |
|---|---|---|---|
| £1 | | | |
| 50p | | | |
| 20p | | | |
| 10p | | | |
| 5p | | | |
| 2p | | | |
| 1p | | | |
| | **Total Amount** | | |

# Calculator Flags



Fill in the flags to show what to add or subtract. *Two are done for you.*




300 → 299

189 → 199

+100

289 → 290

1300 → 1290

1000 → 500

9999 → 8999

8889 → 8899

8888 → 8898

8999 → 8998

9999 → 9990

9000 → 9900

400 → 1400

1475 → 1470

1000 → 999

9900 → 9999

9000 → 900

8099 → 9999