## Q1.

A book has 276 pages.

Amina has read $\frac{1}{3}$ of the book.

How many pages are **left** for Amina to read?

Show your method

pages

2 marks

## Q2.

The numbers in this sequence increase by equal amounts each time.

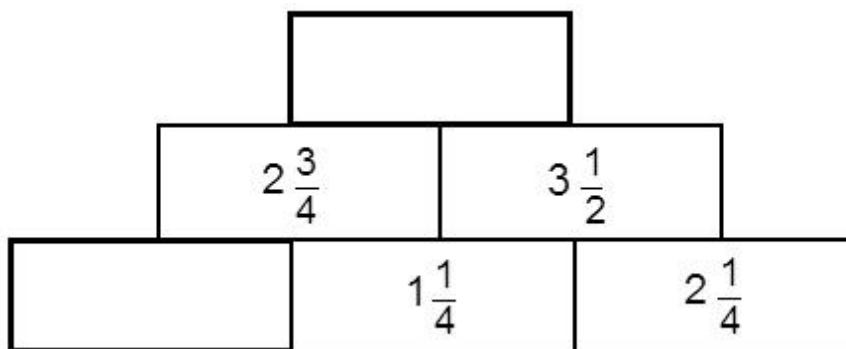Write in the three missing numbers.

| 1 | | | | 7 |
|---|---|---|---|---|

2 marks

## Q3.

In this diagram, the number in each box is the **sum** of the two numbers below it.

Write the missing numbers.

|  |  |
|---|---|
| $2\frac{3}{4}$ | $3\frac{1}{2}$ |

| | $1\frac{1}{4}$ | $2\frac{1}{4}$ |
|---|---|---|

**Q4.**

Karen makes a fraction using two number cards.

She says,

'My fraction is equivalent to $\frac{1}{2}$

One of the number cards is 6'

What could Karen's fraction be?

Give both possible answers.

☐/☐   or   ☐/☐

2 marks

**Q5.**

Complete these fractions to make each equivalent to $\frac{3}{5}$

$\frac{\square}{10}$            $\frac{\square}{15}$

$\frac{12}{\square}$

1 mark

**Q6.**

Three children do a sponsored silence.



This is a chart of the money they collected.
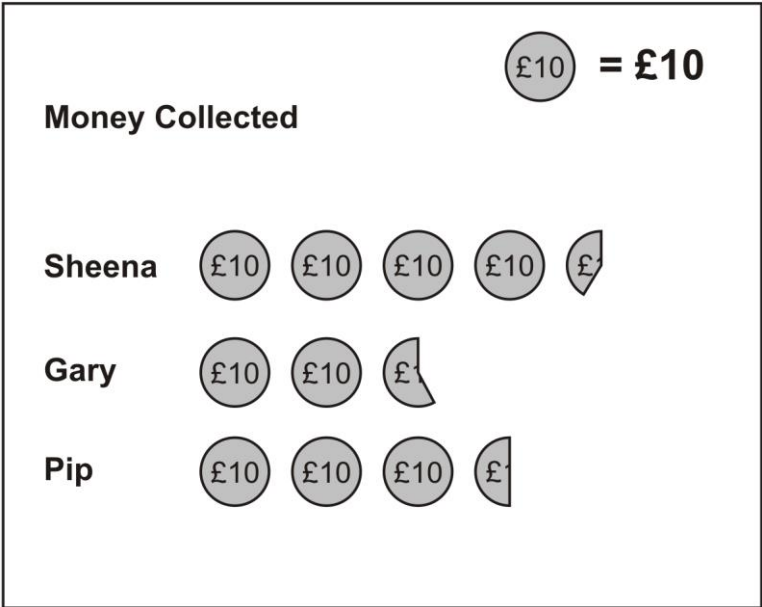


Estimate how much **Sheena** collected.

£ _____

1 mark

Together **Gary** and **Pip** collected **more than £60**

Explain how the **chart** shows this.
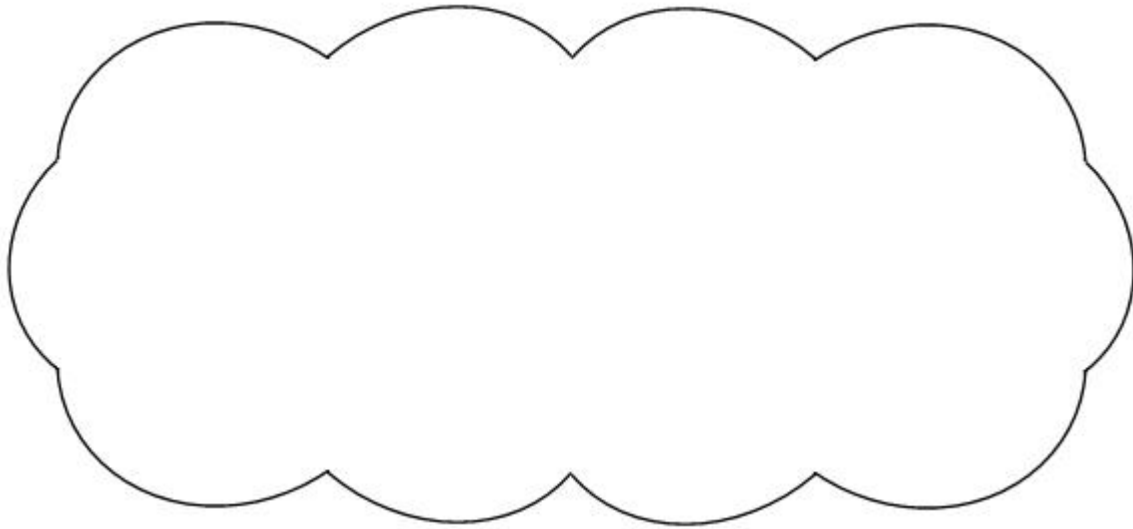
## Q7.

How many quarters are there in $2\frac{3}{4}$ ?

## Q8.

Write the missing numbers.

One is done for you.

| Improper fraction | Mixed number |
|---|---|
| $\dfrac{7}{4}$ | $1\dfrac{3}{4}$ |
| $\dfrac{\square}{2}$ | $5\dfrac{1}{2}$ |
| $\dfrac{17}{5}$ | $3\dfrac{\square}{5}$ |

**Q9.**

How many halves are there in 15?

1 mark

**Q10.**

The length of a day on Earth is 24 hours.

The length of a day on Mercury is $58\frac{2}{3}$ times the length of a day on Earth.

What is the length of a day on Mercury, in **hours**?

Show your method

hours

2 marks

## Q11.

This is a diagram of a vegetable garden.

It shows the fractions of the garden planted with potatoes and cabbages.

potatoes
$\frac{2}{3}$

cabbages
$\frac{1}{4}$

carrots

**Not to scale**
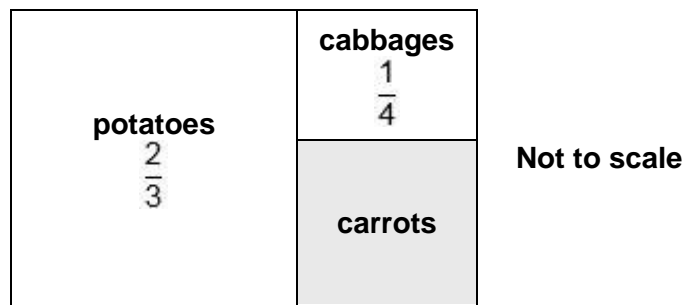
The remaining area is planted with carrots.

What **fraction** of the garden is planted with carrots?

Show your method
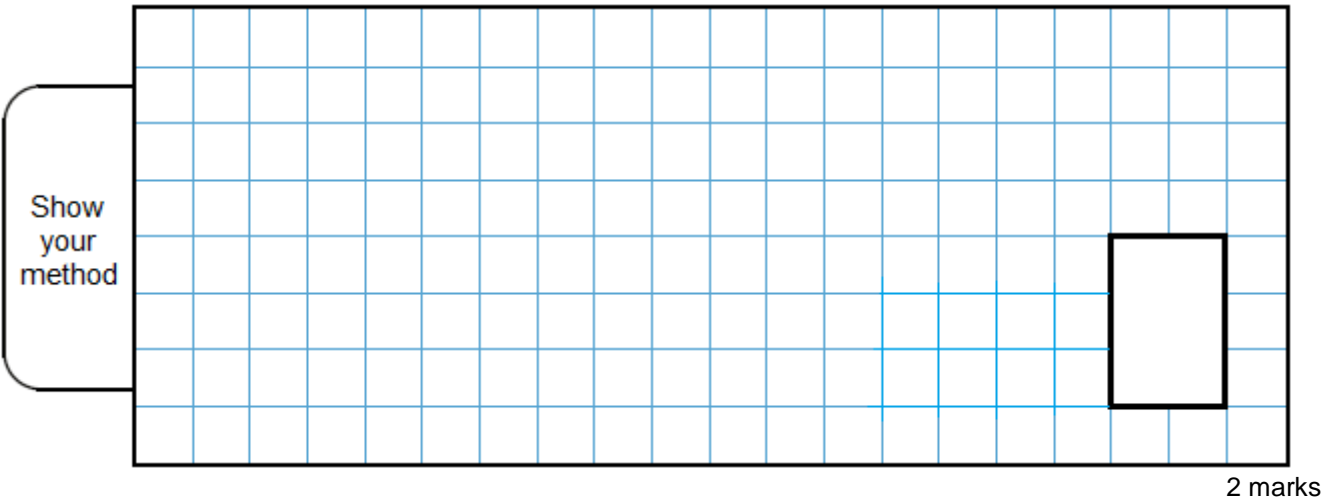
2 marks

**Q12.**

Lara had some money.

She spent £1.25 on a drink.

She spent £1.60 on a sandwich.

She has **three-quarters** of her money left.

How much money did Lara have to **start with**?

Show your method

£

2 marks

Mark schemes

## Q1.

Award **TWO** marks for the correct answer of 184

If the answer is incorrect, award **ONE** mark for:

- sight of 92

**OR**

- evidence of appropriate method, e.g.

  - $\frac{1}{3}$ × 276 = 92
    92 × 2 =
  - 276 ÷ 3 = 92
    276 − 92 =

    *Answer need not be obtained for the award of* ***ONE*** *mark.*

    **Up to 2 marks**

[2]

## Q2.

Award **TWO** marks for the sequence completed correctly as shown:

| 1 | $2\frac{1}{2}$ | 4 | $5\frac{1}{2}$ | 7 |

If the answer is incorrect, award **ONE** mark for two numbers correct.

**Up to 2**

[2]

## Q3.

(a) $6\frac{1}{4}$

*Accept equivalent fractions.*

***Do not*** *accept* $5\frac{5}{4}$

1

(b) $1\frac{1}{2}$

*Accept equivalent fractions, eg*

$1\frac{2}{4}$, $\frac{3}{2}$, *1.5, 150%*

1

[2]

**Q4.**

Award **TWO** marks for both fractions correct as shown:

$$\frac{3}{6} \quad \text{OR} \quad \frac{6}{12}$$

If the answer is incorrect, award **ONE** mark for one fraction correct.
*Accept fractions written in either order.*

Up to 2

**[2]**

**Q5.**

Fractions completed as shown below:

$$\frac{6}{10} \qquad \frac{9}{15}$$

$$\frac{12}{20}$$

*All three fractions must be correct for the award of the mark.*

**[1]**

**Q6.**

(a)   Answer in the range of £43 to £44 inclusive.

1

(b)   Explanation which implies that Gary has an amount greater than £25 but less than £27.50 and that Pip has £35±1, so that their total is greater than £60, eg

- 'Gary has 26 Pip has 35';

- 'The chart shows that Gary has 2 and $\frac{2}{3}$ and Pip has 3 and a half, so that's over 60 pounds';

- 'The whole symbols together make 50 and then it's 2 halves and Pip has half and Gary has more than half'.

    *Do not accept vague or arbitrary answers, eg*
    - *'By the number of coins';*
    - *'There are 5 ten pounds and 2 halves';*
    - *'A coin = 10 pounds and a broken coin = a fraction of a coin so a fraction of the money'.*

1

**[2]**

**Q7.**

11 quarters

**[1]**

## Q8.

$\dfrac{\boxed{11}}{2}$

1

$3\dfrac{\boxed{2}}{5}$

1

**[2]**

## Q9.

30

**[1]**

## Q10.

Award **TWO** marks for the correct answer of 1,408

**OR**

for an answer in the range of 1,406 to 1,409 inclusive.

If the answer is incorrect, award **ONE** mark for:

• sight of 1,392

**OR**

• evidence of an appropriate method, e.g.

• $24 \times 58\dfrac{2}{3}$ = answer

   *Within an appropriate method, if a decimal equivalent for $\dfrac{2}{3}$ is given, it must be rounded or truncated to at least 2 decimal places.*

• $24 \times 58 = 1{,}394$ *(error)*
   $\dfrac{2}{3}$ of 24 = 16
   1,394 + 16 = answer

• $24 \times \dfrac{176}{3}$ = answer
• $24 \times 58.67$ = answer.
   *A final answer is required for the award of **ONE** mark.*

Up to 2m

**[2]**

## Q11.

Award **TWO** marks for the correct answer of $\frac{1}{12}$ or an equivalent fraction.

If the answer is incorrect, award **ONE** mark for:

- sight of $\frac{11}{12}$

**OR**

- evidence of appropriate method, e.g.

  - $\frac{2}{3} + \frac{1}{4}$

    $\frac{8}{12} + \frac{3}{12} = \frac{10}{12}$ *(error)*

    $1 - \frac{10}{12} =$

  - $1 - \frac{2}{3} - \frac{1}{4} =$

    *Answer need not be obtained for the award of **ONE** mark.*

    **Up to 2m**

    **[2]**

## Q12.

Award **TWO** marks for the correct answer of £11.40.

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g.

- £1.25 + £1.60 = £2.85
  £2.85 × 4

    *Accept for **ONE** mark an answer of £1,140 **OR** £1,140p **OR** £11.4 as evidence of an appropriate method.*

    *Answer need not be obtained for the award of **ONE** mark.*

    **Up to 2m**

    **[2]**