

Q1.

In a race, Ali completes a swim, a run and a bicycle ride.

The swim is $\frac{1}{10}$ of the total distance.

The run is $\frac{3}{10}$ of the total distance.

What fraction of the total distance is the **bicycle ride**?

1 mark

Q2.

Circle the improper fraction that is equivalent to $2\frac{3}{8}$

$$\frac{5}{8}$$

$$\frac{14}{8}$$

$$\frac{19}{8}$$

$$\frac{23}{8}$$

$$\frac{26}{8}$$

1 mark

Q3.

Tick the fractions **less than** $\frac{5}{8}$

$$\frac{1}{2}$$

☐

$$\frac{2}{8}$$

☐

$$\frac{3}{4}$$

☐

$$\frac{7}{16}$$

☐

$$\frac{24}{32}$$

☐

2 marks

Q4.

Write these in order of size, starting with the smallest.

$$\frac{3}{4}$$

0.34

0.7

43%



smallest

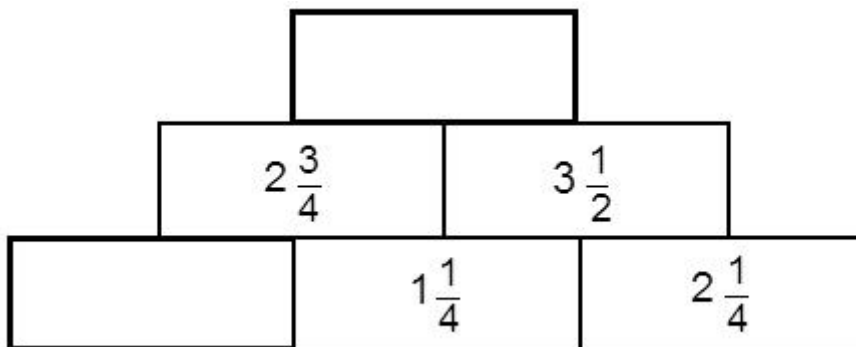


1 mark

Q5.

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

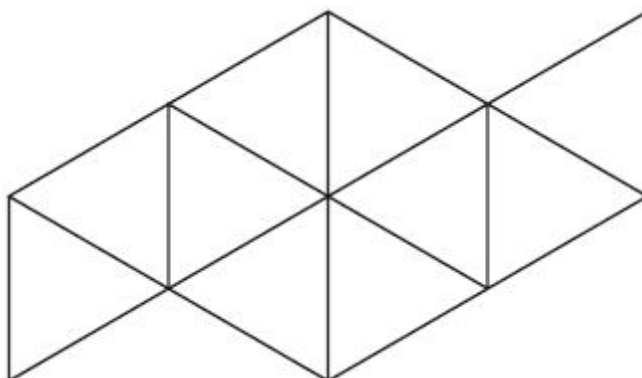
Write the missing numbers.



2 marks

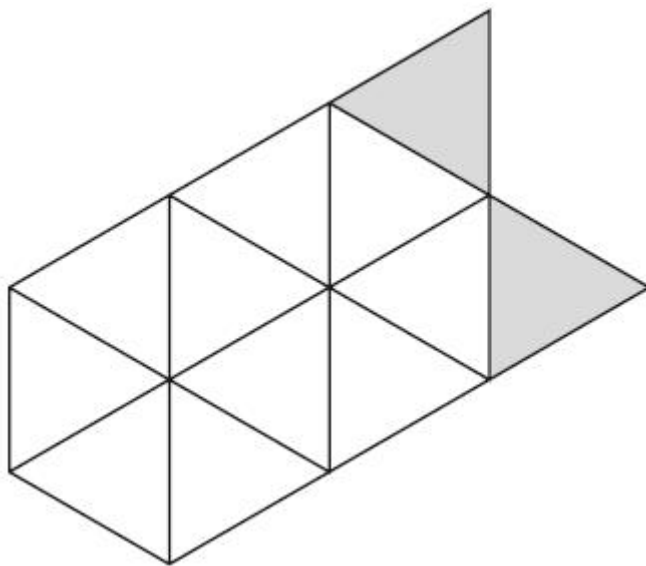
Q6.

Shade $\frac{1}{5}$ of this shape.



1 mark

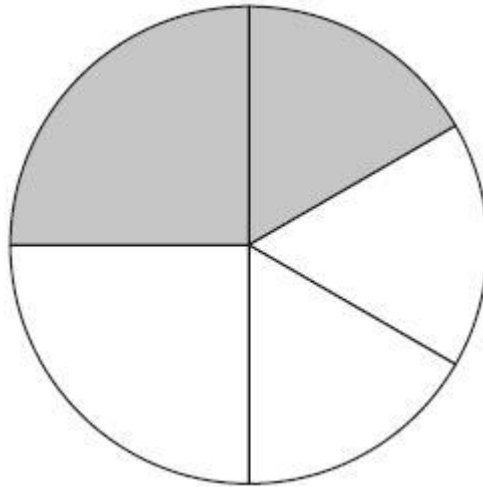
Shade **more** triangles on this shape so that is $\frac{1}{3}$ shaded



1 mark

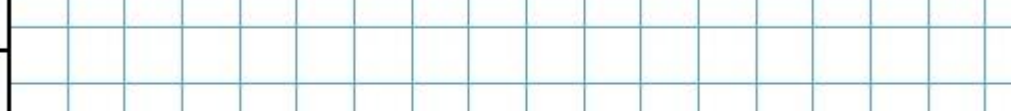
Q7.

In this circle, $\frac{1}{4}$ and $\frac{1}{6}$ are shaded.



What fraction of the whole circle is **not** shaded?

Show your method



2 marks

Q8.

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

Q9.

Circle the improper fraction that is equivalent to $6\frac{7}{8}$

$$\frac{67}{8}$$

$$\frac{48}{8}$$

$$\frac{62}{8}$$

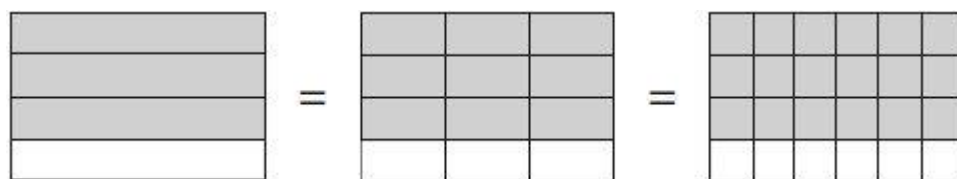
$$\frac{55}{8}$$

$$\frac{76}{8}$$

1 mark

Q10.

These diagrams show three equivalent fractions.



Write the missing values.

$$\frac{3}{4} = \frac{9}{\boxed{}} = \frac{\boxed{}}{24}$$

1 mark

Q11.

Write the missing values.

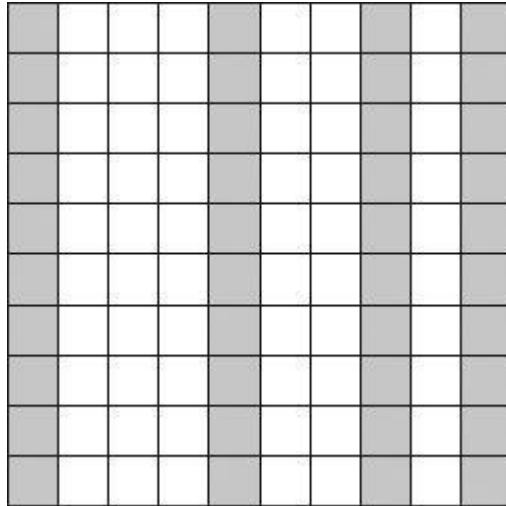
$$\frac{3}{10} = \frac{\boxed{}}{20}$$

$$\frac{12}{15} = \frac{4}{\boxed{}}$$

1 mark

Q12.

Part of this 10×10 grid is shaded.



Tick the fractions that represent the shaded part of the grid.

$$\frac{1}{4}$$

☐

$$\frac{2}{5}$$

☐

$$\frac{4}{10}$$

☐

$$\frac{6}{10}$$

☐

$$\frac{40}{100}$$

☐

2 marks

Mark schemes

Q1.

$$\frac{6}{10}$$

Accept equivalent fractions and decimals, e.g. $\frac{3}{5}$ and 0.6
Do **not** accept 60%

[1]

Q2.

Correct response circled, as shown:

$$\frac{5}{8} \quad \frac{14}{8} \quad \frac{19}{8} \quad \frac{23}{8} \quad \frac{26}{8}$$

Accept alternative unambiguous positive indication of the correct answer.

[1]

Q3.

Award **TWO** marks for three boxes ticked correctly, as shown:

$\frac{1}{2}$	☒
$\frac{2}{8}$	☒
$\frac{3}{4}$	☐
$\frac{7}{16}$	☒
$\frac{24}{32}$	☐

Award **ONE** mark for:

- only two boxes ticked correctly and no incorrect boxes ticked

OR

- three boxes ticked correctly and one incorrect box ticked.

Accept alternative unambiguous positive indication of the correct answer, e.g. Y.

Up to 2m

[2]

Q4.

Numbers in order as shown:

$$0.34$$

$$43\%$$

$$0.7$$

$$\frac{3}{4}$$

Accept use of equivalent fractions, decimals or percentages, eg 0.34, 0.43, 0.7, 0.75

[1]

Q5.

(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]

Q6.

- (a) Any two triangles in the shape shaded.

Accept alternative unambiguous indications.

1

- (b) Any two more triangles in the shape shaded.

Accept alternative unambiguous indications.

1

[2]

Q7.

Award **TWO** marks for the correct answer of $\frac{7}{12}$

*Accept equivalent fractions or an **exact** decimal equivalent,
e.g. 0.538*

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

- $\frac{1}{4} + \frac{1}{6} =$
 $\frac{3}{12} + \frac{2}{12} = \frac{5}{12}$
 $1 - \frac{5}{12}$

OR

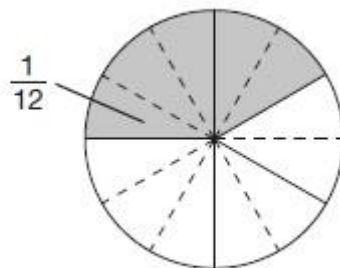
- $\frac{1}{4} + \frac{1}{6} + \frac{1}{6}$

OR

- $1 - \frac{1}{4} - \frac{1}{6}$

OR

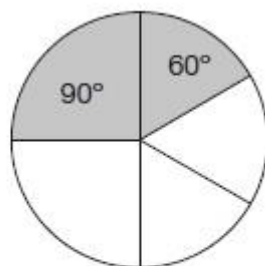
-



$$\frac{3}{12} + \frac{4}{12}$$

OR

-



$$90^\circ + 60^\circ = 150^\circ$$

$$1 - \frac{150}{360}$$

Accept for **ONE** mark an answer between 0.58 and 0.59 inclusive.

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

Up to 2m

[2]

Q8.

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.

$$\begin{array}{l} \cdot \quad \overset{1}{\overline{3}} \times 276 = 92 \\ \quad 92 \times 2 = \\ \cdot \quad 276 \div 3 = 92 \\ \quad 276 - 92 = \end{array}$$

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

Up to 2 marks

[2]

Q9.

Correct number circled, as shown:

$$\frac{67}{8} \quad \frac{48}{8} \quad \frac{62}{8} \quad \left(\frac{55}{8} \right) \quad \frac{76}{8}$$

Accept alternative unambiguous positive indication of the correct answer, e.g. fraction ticked.

[1]

Q10.

Both values correct, as shown:

$$\frac{3}{4} = \frac{9}{\boxed{12}} = \frac{\boxed{18}}{24}$$

*Both values must be correct for the award of **ONE** mark.*

[1]

Q11.

Award **ONE** mark for both numbers correct, as shown:

$$\begin{array}{l} \frac{3}{10} = \frac{\boxed{6}}{20} \\ \frac{12}{15} = \frac{4}{\boxed{5}} \end{array}$$

[1]

Q12.

Award **TWO** marks for three boxes ticked correctly, as shown:

$\frac{1}{4}$	☐
$\frac{2}{5}$	☒
$\frac{4}{10}$	☒
$\frac{6}{10}$	☐
$\frac{40}{100}$	☒

Accept alternative unambiguous positive indication of the correct answer, e.g. Y.

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

- only two boxes ticked correctly and no incorrect boxes ticked.

OR

- three boxes ticked correctly and one incorrect box ticked.

Up to 2m

[2]