

Answer ALL TWENTY questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

- 1 (a) Write these numbers in order of size.
Start with the smallest number.

-7 3 -5 -9 0 1

.....
(1)

- (b) Write these numbers in order of size.
Start with the smallest number.

0.078 0.7 0.87 0.08 0.707

.....
(1)

- (c) Write 0.017 as a fraction.

.....
(1)

- (d) Write 0.6 as a percentage.

.....%
(1)

- (e) Which **one** of the following fractions is equivalent to $\frac{2}{3}$?

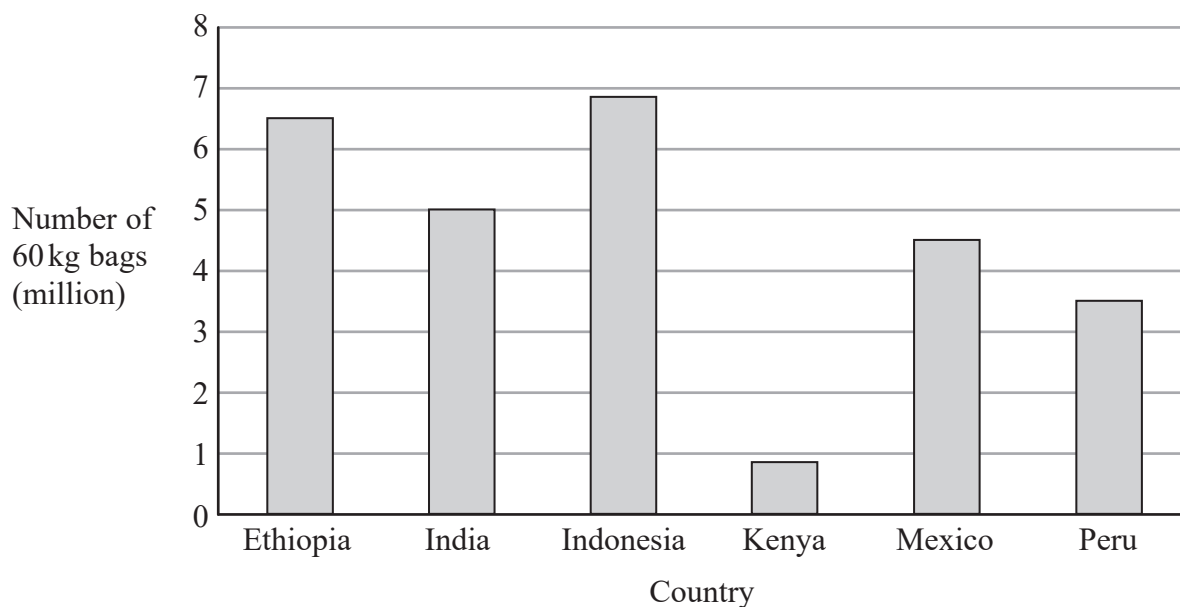
$\frac{10}{12}$ $\frac{3}{6}$ $\frac{10}{18}$ $\frac{12}{18}$ $\frac{9}{12}$

.....
(1)

(Total for Question 1 is 5 marks)



- 2 The bar chart shows the number of 60 kg bags of coffee produced by each of six countries in 2014



- (a) Which of these countries produced the greatest number of 60 kg bags of coffee in 2014?

.....
(1)

- (b) Find the number of 60 kg bags of coffee produced by India in 2014

.....million
(1)

- (c) Which of these countries produced 4.5 million 60 kg bags of coffee in 2014?

.....
(1)

The number of 60 kg bags of coffee produced by Kenya in 2014 was 0.85 million.

- (d) Work out the total weight of this coffee.
Give your answer in tonnes.

.....tonnes
(3)

(Total for Question 2 is 6 marks)



3 (a) Write the number 45.621 correct to the nearest whole number.

.....
(1)

(b) Write the number 6739 correct to the nearest hundred.

.....
(1)

(c) Find the number that is exactly half way between 5.2 and 5.5

.....
(2)

(d) Work out 45% of 800

.....
(2)

(e) Work out $\frac{3}{8}$ of 240 kg.

..... kg
(2)

384 of the 403 people on a plane are passengers.
The rest of the people on the plane are crew.

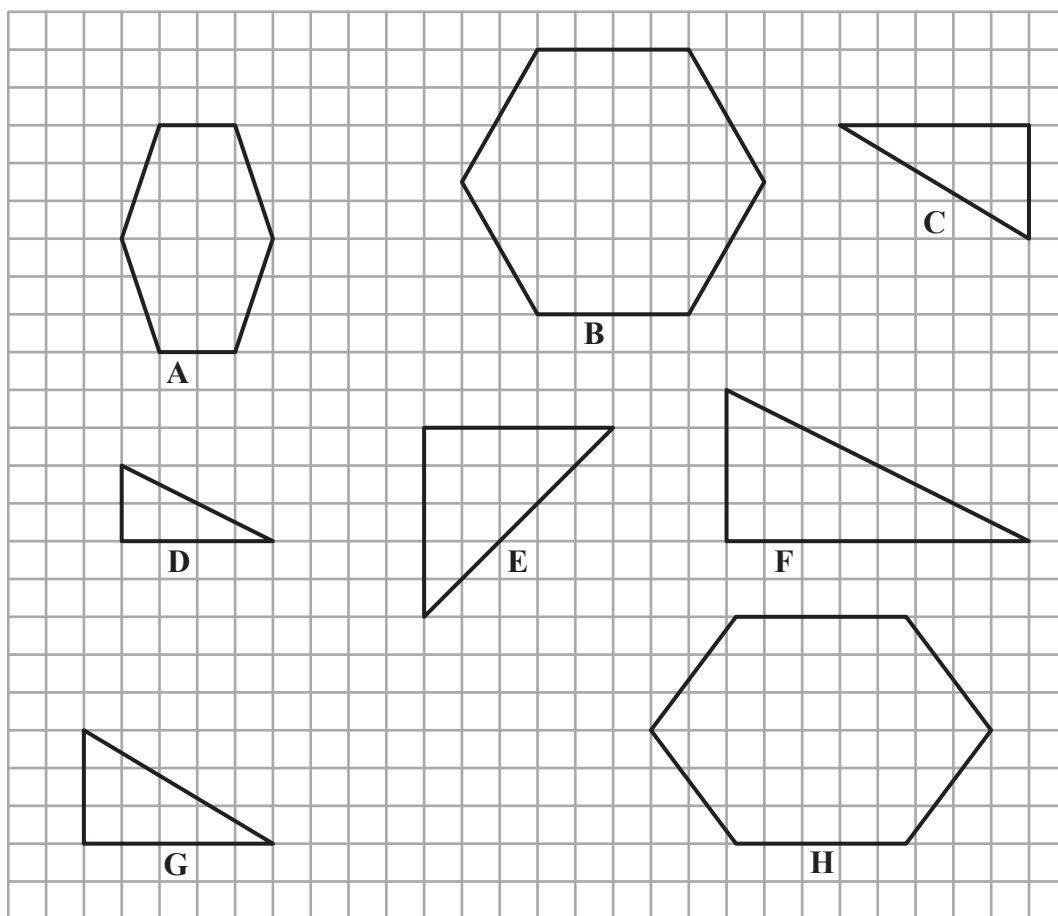
(f) What fraction of the people on the plane are crew?

.....
(2)

(Total for Question 3 is 10 marks)



4 Here are eight shapes drawn on a grid of squares.



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Shape **A** is a polygon.

(a) What is the mathematical name of this polygon?

..... (1)

Shape **B** is a regular polygon.

(b) Explain what this tells you about shape **B**.

.....
 (1)

Two of the shapes have exactly 2 lines of symmetry.

(c) Write down the letters of these two shapes.

..... and (2)



One of the shapes is congruent to shape **G**.

(d) Write down the letter of this shape.

.....
(1)

One of the shapes is similar to shape **F**.

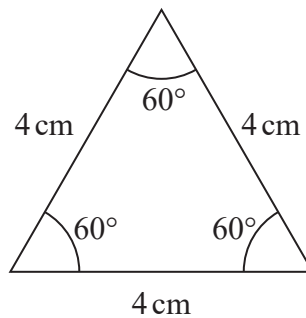
(e) Write down the letter of this shape.

.....
(1)

(f) How many lines of symmetry has shape **E**?

.....
(1)

Here is an equilateral triangle.



The equilateral triangle is going to be enlarged by scale factor 2

For the enlarged triangle, write down

(g) (i) the length of each side,

.....cm

(ii) the size of each angle.

.....°

(2)

(Total for Question 4 is 9 marks)



5 Here are the first five terms of a number sequence.

3 6 12 24 48

(a) (i) Write down the next term of the sequence.

.....

(ii) Explain how you found your answer.

.....
(2)

The 20th term of the sequence is 1 572 864

(b) Find the 19th term of the sequence.

.....
(2)

Kaz says that 7 962 622 is a term of this sequence.
Kaz is wrong.

(c) Explain why.

.....
.....
(1)

(Total for Question 5 is 5 marks)



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6 Here is the number of goals scored by a hockey team in each of 10 games.

4 2 1 2 1 3 2 6 4 3

(a) Work out the range.

.....

(2)

(b) Work out the median.

.....

(2)

(c) Work out the mean.

.....

(2)

(Total for Question 6 is 6 marks)

