## GCSE Mathematics <br> Practice Tests: Set 1A

## Paper 1F (Non-calculator)

## Time: 45 minutes

You should have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser.

## Instructions

- Use black ink or ball-point pen.
- Fill in the boxes at the top of this page with your name, centre number and candidate number.
- Answer all questions.
- Answer the questions in the spaces provided - there may be more space than you need.
- Calculators must not be used.

- Diagrams are NOT accurately drawn, unless otherwise indicated.
- You must show all your working out.


## Information

- The total mark for this paper is 40
- The marks for each question are shown in brackets
- use this as a guide as to how much time to spend on each question.


## Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.


## Answer ALL questions. <br> Write your answers in the spaces provided. <br> You must write down all the stages in your working.

1. Write these numbers in order of size.

Start with the smallest number.
$\begin{array}{lllll}6 & -3 & 9 & -5 & 4\end{array}$
2. Change 0.7 into a percentage.
$\qquad$ \%
(Total 1 mark)
3. The total cost of these 2 pens is 60 p .


Work out the total cost of 5 of these pens.
Give your answer in pounds.
$\qquad$
4.

Diagram NOT
accurately drawn


Here is a picture of a stick.
The stick is in three parts, A, B and C.
The total length of the stick is 30 cm .
The length of part A is 16 cm .
The length of part B is 9 cm .
Work out the length of part C.
5. Ann works in a sandwich shop.

The dual bar chart shows information about the sandwiches sold.

(a) Write down the total number of cheese sandwiches sold.

More white bread sandwiches were sold than brown bread sandwiches.
(b) Work out how many more white bread sandwiches.
6. (a) Solve $x+3=12$

$$
x=\text {.............................. }
$$

(b) Solve $\frac{y}{5}=10$
$y=$. $\qquad$
7. The diagram shows a rectangle and a square.


The perimeter of the rectangle is the same as the perimeter of the square.
Work out the length of one side of the square.
$\qquad$ cm
8. Here is a menu in a café.

| Menu |  |
| :---: | :---: |
| Starter | Main Course |
| Soup | Chicken |
| Melon | Fish |
|  | Omelette |

A meal is a starter and a main course.
One possible meal is Soup and Chicken, (S, C).
Charlie wants to choose a meal.
(a) Make a list of all the different meals she can have.

One has been done for you.
(S, C) $\qquad$
$\qquad$

A meal is chosen at random.
(b) What is the probability that the meal will be Melon and Chicken?

The café adds fruit juice as another starter.
Charlie says 'Now there will be one more meal to choose from'.
(c) Show that Charlie is wrong.
$\qquad$
$\qquad$
9. Mr Brown and his 2 children are going to London by train.

An adult ticket costs $£ 24$.
A child ticket costs $£ 12$.
Mr Brown has a Family Railcard.

Family Railcard gives
$\frac{1}{3}$ off adult tickets
$60 \%$ off child tickets

Work out the total cost of the tickets when Mr Brown uses his Family Railcard.
10. On the grid, draw the graph of $y=3 x+2$ for values of $x$ from -2 to 2 .

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

11. 


(a) Translate shape P by the vector $\binom{5}{-2}$.

(b) Describe fully the single transformation that maps shape A onto shape $\mathbf{B}$.
$\qquad$
$\qquad$
(Total 5 marks)
$\qquad$
12. The height, $H \mathrm{~cm}$, of a table is measured as 72 cm correct to the nearest centimetre.

Complete the following statement to show the range of possible values of $H$.
$\leq H<$ $\qquad$
13. Sasha carried out a survey of 60 students.

She asked them how many CDs they each have.
This table shows information about the numbers of CDs these students have.

| Number of CDs | $0-4$ | $5-9$ | $10-14$ | $15-19$ | $20-24$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Frequency | 8 | 11 | 9 | 14 | 18 |

(a) Write down the class interval containing the median.
(b) On the grid, draw a frequency polygon to show the information given in the table.

(2)
(Total 3 marks)
14. (a) Write down the value of $5^{0}$
$\qquad$
(b) Write down the value of $2^{-1}$

