

IGCSE Maths

Revision Test

Number – Expressions and Sequences – Fractions –
Decimals and Estimations – Expanding Brackets and
Factorising – Linear Equations – Measure -
Percentages

Duration : 60 min

Total Marks : 61

Date :

Name :

Copyright notice

All rights reserved. No part of this publication may be reproduced in any form or by any means (including photocopying or storing it in any medium by electronic means and whether or not transiently or incidentally to some other use of this publication) without the written permission of the copyright owner.

Phi Tuition Ltd
www.phi-tuition.eu
email@phi-tuition.eu

Question 1

(a) Simplify $4x + 3y - 2x + 5y$ (2)

Compasses cost c pence each.

Rulers cost r pence each.

(b) Write down an expression for the total cost, in pence, of 2 compasses and 4 rulers. (2)

Question 2

Use the information that

$$322 \times 48 = 15\,456$$

to find the value of

(a) 3.22×4.8 (1)

(b) 0.322×0.48 (1)

(c) $15\,456 \div 4.8$ (1)

Question 3

There are 40 litres of water in a barrel.

The water flows out of the barrel at a rate of 125 millilitres per second.

1 litre = 1000 millilitres.

Work out the time it takes for the barrel to empty completely.

(Total 3 marks)

Question 4

The length of a line is 63 centimetres, correct to the nearest centimetre.

(a) Write down the **least** possible length of the line.

..... centimetres
(1)

(b) Write down the **greatest** possible length of the line.

..... centimetres
(1)

Question 5

(a) Factorise fully $4x^2 - 6xy$ (2)

(b) Factorise $x^2 + 5x - 6$ (2)

Question 6

Work out an estimate for the value of $\frac{31 \times 4.92}{0.21}$

(Total 3 marks)

Question 7

(a) Work out $\frac{3}{8} + \frac{1}{4}$

Give your answer in its simplest form. **(2)**

(b) Work out $\frac{2}{3} \times \frac{4}{5}$ **(2)**

(c) Work out 423×12 **(3)**
You must show all your working.

Question 8

- (a) A solid cube has sides of length 5 cm.

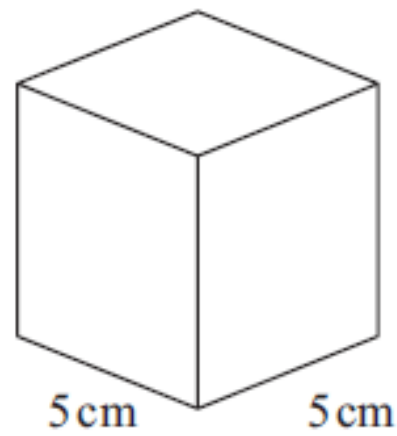


Diagram NOT
accurately drawn

Work out the total surface area of the cube.
State the units of your answer.

(4)

Question 8

The volume of the cube is 125 cm^3 .

(b) Change 125 cm^3 into mm^3 . **(2)**

The weight of the cube is 87 grams, correct to the nearest gram.

(c) (i) What is the minimum the weight could be?

(ii) What is the maximum the weight could be? **(2)**

Question 9

(a) Simplify $3a + 4c - a + 3c$ (2)

(b) Expand $y(2y - 3)$ (1)

(c) Factorise $x^2 - 4x$ (2)

Question 10

Expand and simplify $2(x + 3) + 3(2x - 1)$ **(2)**

Solve $3(x + 2) = 8$ **(2)**

Question 11

Batteries are sold in packets and boxes.

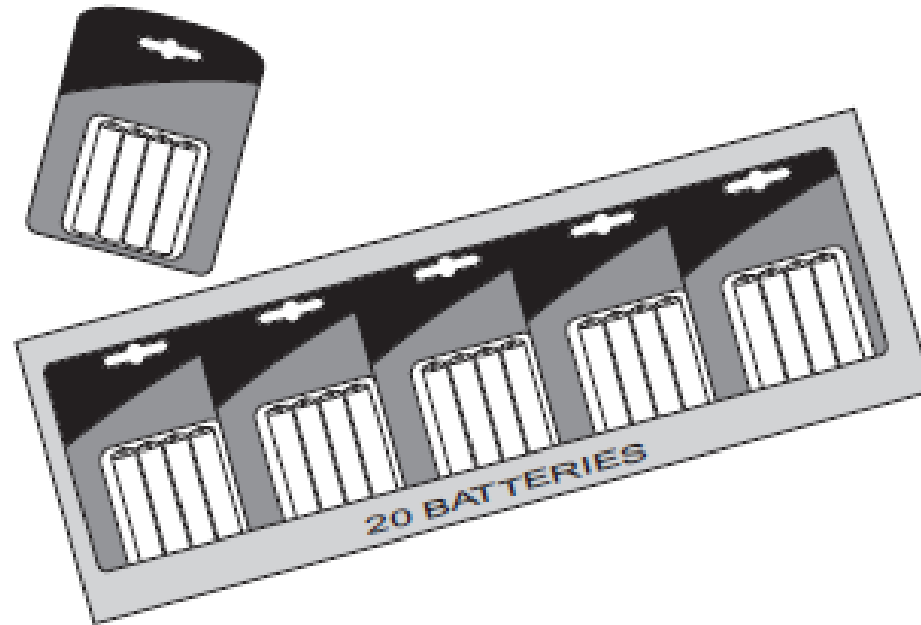
Each packet contains 4 batteries.

Each box contains 20 batteries.

Bill buys p packets of batteries
and b boxes of batteries.

Bill buys a total of N batteries.

Write down a formula for N in
terms of p and b .



(Total 3 marks)

Question 12

Prove that the recurring decimal $0.\dot{3}\dot{6} = \frac{4}{11}$ (Total 3 marks)

Question 13

The n th term of a number sequence is given by $3n + 1$

(a) Work out the first two terms of the number sequence. (1)

Here are the first four terms of another number sequence.

1 5 9 13

(b) Find, in terms of n , an expression for the n th term of this number sequence. (2)

Question 14

Work out $\frac{2}{3} \div \frac{5}{6}$

Give your fraction in its simplest form.

(3)

Question 15

Work out $2\frac{1}{3} - 1\frac{2}{5}$

(3)

Question 16

Anna, Beatrix and Carol are all sisters who are aged 7, 9 and 12 years old respectively. Their pocket money each week is equal how old they are in years.

(a) Prove that Anna receives 25% of the total pocket money given to all three Sisters (1)

(b) Calculate what percentage of the total pocket money Beatrix will be getting in 4 years time. (2)