



Aberdare Community School
Mathematics Department

WJEC GCSE

Foundation – Non Calculator
Number

Number - questions 6 to 9

Name:

Set:

Date:

Teacher:

7. (a) A box contains 42 wine glasses.
The box is dropped and $\frac{5}{6}$ of the glasses are broken.
How many glasses are broken?

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[2]

- (b) The restaurant in a hotel has 16 tables. Each table can seat 6 persons.
Calculate the maximum number of people that can be seated in the restaurant.

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[2]

- (c) Sian buys 8 dinner plates.
The total cost of the plates is £120.
Calculate the cost of one plate.

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[2]

(e) From the following list of numbers

15 17 27 36 54 21 39

write down

(i) a prime number,

(ii) a cube number.

[2]

(f) Write down the value of

(i) 0.3×0.7 ,

(ii) $4.7 - 3.52$

[2]

6. (a) Draw a circle around **each** of the following fractions which is equal to $\frac{1}{4}$.

[2]

$\frac{6}{12}$ $\frac{2}{8}$ $\frac{7}{21}$ $\frac{12}{20}$ $\frac{5}{25}$ $\frac{7}{28}$ $\frac{15}{35}$

(b) Claire earns £500 each week.
She uses $\frac{1}{5}$ of the £500 to pay her rent each week.
She saves 25% of the £500 each week.

Tim says that Claire spends more on rent than she saves.

Explain why Tim is wrong.

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[2]

(c) Write 0.5 as a percentage.
Write $\frac{1}{4}$ as a percentage.
Write 0.5, $\frac{1}{4}$ and 60% in ascending order.

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[3]

(d) Tom buys four oranges.
Each orange costs 72p.
Tom pays using a £10 note.
How much change should Tom be given?

[2]

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6. (a) There are 56 drawing pins in each of 38 boxes.
How many drawing pins are there altogether?

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[3]

- (b) Calculate $\frac{5}{9}$ of 45.

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[2]

- 8. Mary and John are organising a packed lunch and a bottle of water for each pupil going on a school trip.

Mary puts the packed lunches into boxes with each box holding 20 lunches.

John puts the bottles of water into crates with each crate holding 18 bottles.

When they have finished Mary has filled 45 boxes and John has filled 52 crates.

Showing all your calculations, explain whether or not John has enough water to give one bottle with each lunch?

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[6]

6. (a) Calculate 124×36 .

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(b) Calculate

(i) $\frac{2}{5}$ of 40,

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[2]

(ii) 6% of 400.

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[2]

7. (a) Write down the value of $3^2 \times 5^2$.

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[2]

- (b) Evaluate $\sqrt[3]{64}$.

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[1]

- (c) Carly says the answer to $8 + 3 \times 5$ is 55.
Simon says the answer to $8 + 3 \times 5$ is 23.
Explain clearly whether Carly or Simon is correct. Give a reason for your answer.

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[2]

8. (a) A full crate holds 36 bottles.
A farmer has 48 full crates.
How many bottles is this?

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[3]

- (b) Calculate 8% of 300.

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[2]

7. (a) Arrange the following in ascending order.

0.34 0.3 0.04 0.403

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[1]

- (b) Evaluate $\frac{3}{8} + \frac{1}{2}$.

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[2]

6. (a) Showing all your working, write 0.37 , $\frac{2}{5}$ and $\frac{35}{100}$ in ascending order.

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[3]

- (b) Find the value of $2^3 \times 5^2$.

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[2]

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6. Complete the following table so that each row will show equivalent fractions, decimals and percentages. [4]

Fraction	Decimal	Percentage
$\frac{1}{4}$	0.25	25%
		40%
	0.3	

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only

6.

25	6	8	20
7	10	1000	24

Choose a number from the table to match each statement.
You must give a reason for each answer.

[6]

A factor of 12:

Reason:

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A prime number:

Reason:

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The square root of 100:

Reason:

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6. (a) Stan has 163 marbles.
Fred has 285 marbles.
Fred gives some marbles to Stan so that they both have the same number of marbles.
How many marbles does Fred give to Stan? [3]

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- (b) Calculate the value of $2^3 + 5^2$. [2]

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- (c) The probability of Jo forgetting her homework is 0.2.
What is the probability of Jo remembering her homework? [1]

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12. Calculate the value of $\frac{3}{8}$ as a decimal.

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7. (a) **Showing all your working**, write $\frac{1}{2}$, $\frac{5}{8}$, and $\frac{3}{4}$ in order, starting with the largest. [3]

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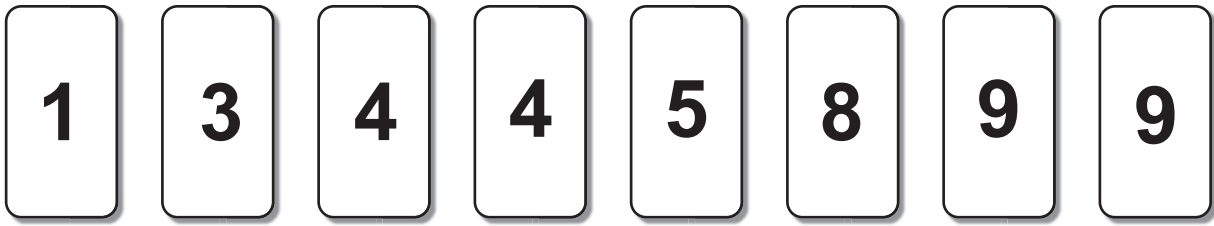
(b) Write down 50p as a fraction of £4 in its simplest form. [2]

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6.



One card is chosen at random from the cards shown above.

Write down the probability of selecting each of the following

(a) the number 5, [1]

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(b) a number less than 4, [1]

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(c) a multiple of 2, [1]

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(d) a square number, [1]

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(e) a prime number, [1]

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(f) the square root of 16. [1]

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8. Karim painted a fence.

On Monday, he painted $\frac{7}{10}$ of the fence.

On Tuesday, he painted another $\frac{1}{5}$ of the fence.

On Wednesday, he finished painting the fence.

What fraction of the fence did Karim paint on Wednesday?

[3]

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6. (a) In a maths test, Zac scored $\frac{3}{5}$ of the maximum possible mark.

Josh scored 62% and Lowri's mark was 0.58 of the maximum possible mark.

Write down which student scored the most marks and which student scored the least marks.

You must show all your working to support your answer. [3]

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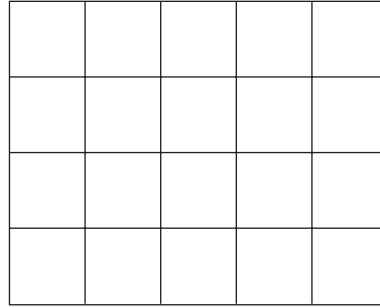
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Student with most marks =

Student with least marks =



7. Three children share 20 cubes.
Melanie takes 25% of the cubes.
John and Denise share the rest of the cubes.
John gets more cubes than Denise.

Examiner
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What is the greatest number of cubes that Denise could get?

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