Edexcel GCSE

Mathematics

Foundation Tier

Number: Place value

Information for students

The marks for individual questions and the parts of questions are shown in round brackets: e.g. **(2)**.
There are 108 questions in this selection.

Advice for students

Show all stages in any calculations.
Work steadily through the paper. Do not spend too long on one question.
If you cannot answer a question, leave it and attempt the next one.
Return at the end to those you have left out.

Information for teachers

The questions in this document are taken from the 2009 GCSE Exam Wizard and include questions from examinations set between January 2003 and June 2009 from specifications 1387, 1388, 2540, 2544, 1380 and 2381.

Questions are those tagged as assessing “Place value” though they might assess other areas of the specification as well. Questions are those tagged as “Foundation” so could have (though not necessarily) appeared on either a Foundation or Intermediate tier paper.

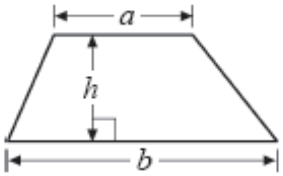
GCSE Mathematics

Formulae: Foundation Tier

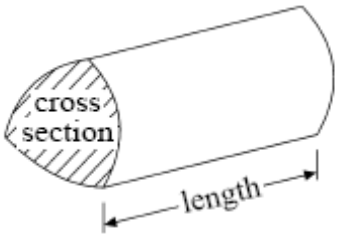
You must not write on this formulae page.

Anything you write on this formulae page will gain NO credit.

Area of trapezium = $(a + b)h$



Volume of prism = area of cross section × length



1. Write these numbers in order of size.
Start with the smallest number.

(i) 75, 56, 37, 9, 59

.....

(ii) 0.56, 0.067, 0.6, 0.65, 0.605

.....

(iii) 5, – 6, – 10, 2, – 4

.....

(iv) $\frac{1}{2}, \frac{2}{3}, \frac{2}{5}, \frac{3}{4}$

.....

(Total 5 marks)

2. 54 327 people watched a concert.

(a) Write 54 327 to the nearest thousand.

.....

(1)

(b) Write down the value of the 5 in the number 54 327.

.....

(1)
(Total 2 marks)

3. Write these numbers in order of size.
Start with the smallest number.

(i) 0.56, 0.067, 0.6, 0.65, 0.605

.....

(ii) 5, – 6, – 10, 2, – 4

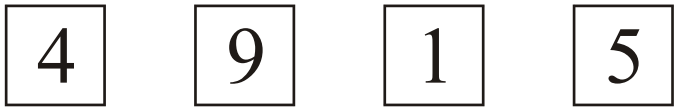
.....

(iii) $\frac{1}{2}, \frac{2}{3}, \frac{2}{5}, \frac{3}{4}$

.....

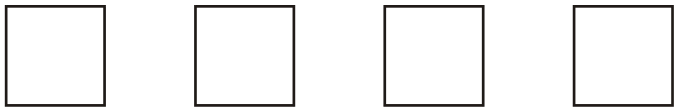
(Total 4 marks)

4. Fiona has four cards.
Each card has a number written on it.

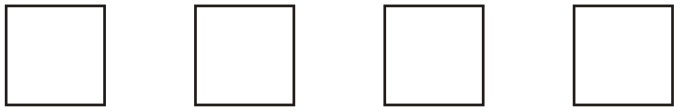


Fiona puts all four cards on the table to make a number.

(a) (i) Write the numbers on the cards to show the smallest number Fiona can make with the four cards.



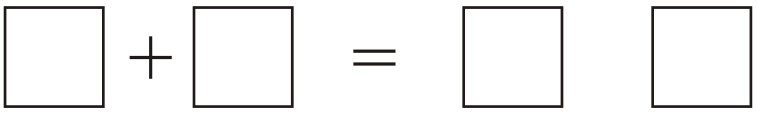
(ii) Write the numbers on the cards to show the largest number Fiona can make with the four cards.



(2)

Fiona uses the cards to make a true statement.

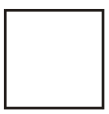
(b) Write the number on the cards to make this true.
Use each of Fiona's cards **once**.



(1)

A fifth card is needed to show the result of the multiplication 4915 × 10. She needs a fifth card

(c) Write the number that should be on the fifth card.



(1)
(Total 4 marks)

5. (a) Write the number **seventeen thousand, two hundred and fifty-two** in figures.

……..

(1)

(b) Write the number 5367 correct to the nearest hundred.

……..

(1)

(c) Write down the value of the 4 in the number 274 863

……..

(1)

(Total 3 marks)

6. (a) Write the number **seven thousand**, **two hundred and fifty two** in figures.

.....

(1)

(b) Write the number 3086 in words.

.....

(1)

(c) Write the number 4637 to the nearest hundred.

.....

(1)

(d) Write the value of 2 in the number 5271

.....

(1)
(Total 4 marks)

7. (a) Write the number 5250 in words.

.....

(1)

(b) Write 23 250 to the nearest thousand.

.....

(1)

(c) Write down the value of the 3 in the number 42 350

.....

(1)

(d) Write **six thousand three hundred and seventy four** in figures.

.....

(1)
(Total 4 marks)

8. (a) Write the number 3187 to the nearest thousand.

.....

(1)

(b) Write the number **four thousand six hundred and eighty one** in figures.

.....

(1)

(c) Write the number 5060 in words.

.....

(1)

(Total 3 marks)

9. (a) Write the number **nine thousand, three hundred and seventy four** in figures.

.....

(1)

(b) Write the number 62 500 in words.

.....

(1)

(c) Write down the value of the **8** in the number 3285

.....

(1)

(d) Write the number 2174 to the nearest hundred.

.....

(1)

(e) Write the number 7362 to the nearest thousand.

.....

(1)

(Total 5 marks)

10. (a) Write down the value of the 5 in the number 54 327.

.....

(1)

(b) Write 0.874 correct to 1 significant figure.

.....

(1)
(Total 2 marks)

11. (a) Write **three hundred and fifty thousand** in figures.

…….

(1)

(b) (i) Write 25 400 in words.

……...

(ii) Write down the value of the **5** in 25 400.

…….

(2)

(c) (i) Write 25 730 correct to the nearest thousand.

…….

(ii) Write 25 730 correct to the nearest hundred.

…….

(2)
(Total 5 marks)

12. (a) Write the number **four thousand and sixty two** in figures.

.....

(1)

(b) Write down the value of the 7 in the number 76 320

.....

(1)

(c) Write the number **2536** to the nearest hundred.

.....

(1)
(Total 3 marks)

13. (a) Write the number **nineteen thousand, four hundred and eighty two** in figures.

.....

(1)

(b) Write the number 7824 correct to the nearest hundred.

.....

(1)

(c) Write down the value of the 3 in the number 2387

.....

(1)
(Total 3 marks)

14. (a) Write the number 5264 in words.

.....

(1)

(b) Write the number 5264 to the nearest hundred.

.....

(1)

(c) Write down the value of the **6** in the number 5264

.....

(1)

(Total 3 marks)

15. Here is a list on numbers.

1.232 1.33 1.23 1.323 1.22

The numbers are going to be written in order, smallest number first.
Which of these numbers would be the 4th in the list?

1.232	1.33	1.23	1.323	1.22
☐	☐	☐	☐	☐
A	**B**	**C**	**D**	**E**

(Total 1 mark)

16. What is the value of the **7** in the number 32 715?

7000	70 000	700	7	70
A	**B**	**C**	**D**	**E**

(Total 1 mark)

17. (a) Write the number **three thousand four hundred and twenty five** in figures.

.....

(1)

(b) Write down the value of 4 in the number 2840

.....

(1)

(c) Write the number 279 to the nearest hundred.

.....

(1)

(Total 3 marks)

18. What is the value of the 6 in the number 2564?

60	6	600	6000	$\frac{6}{10}$
A	**B**	**C**	**D**	**E**

(Total 1 mark)

19. What is the value of the **6** in the number 36 825?

600	60	6	6000	60 000
A	**B**	**C**	**D**	**E**

(Total 1 mark)

01. (i) 9, 37, 56, 59, 75 5

B1 cao

(ii) 0.067, 0.56, 0.6, 0.605, 0.65

B1 cao Ignore trailing zeros

(iii) –10, –6, –4, 2, 5

B1 cao

(iv) $\frac{2}{5}, \frac{1}{2}, \frac{2}{3}, \frac{3}{4}$

B2 for all 4 correct
(B1 for any 3 in correct order)
SC B1 for all 4 in reverse order (applies to(iv) only)

[5]

02. (a) 54 000 1

B1 cao accept 54 thousand

(b) 50 000 1

B1 (accept ten thousand or 10 000) oe

[2]

03. (i) 0.067, 0.56, 0.6, 0.605, 0.65 1

B1 cao Ignore trailing zeros

(ii) –10, –6, –4, 2, 5 1

B1 cao

(iii) $\frac{2}{5}, \frac{1}{2}, \frac{2}{3}, \frac{3}{4}$ 2

B2 all four correct
(B1 any three in correct order)
SC: B1 all 4 in reverse order

[4]

04. (a) (i) 1459 1
B1 cao

(ii) 9541 1
B1 cao

(b) 9 + 5 = 14 1
B1 cao

(c) 0 1
B1 cao

[4]

05. (a) 17252 1
B1 cao

(b) 5400 1
B1 cao

(c) thousands, 1000, 4000 1
B1 cao

[3]

06. (a) 7252 1
B1 cao

(b) Three thousand and eighty six 1
B1 accept 3 thousand and eighty six (condone 0 hundred)

(c) 4600 1
B1 accept 4600

(d) 200 1
B1 for 200 or 2 hundred or 100 or hundred

[4]

07. (a) Five thousand two hundred and fifty 1

B1 accept 5 thousand 2 hundred and 50

(b) 23 000 1

B1 cao

(c) 300 1

B1 accept 3 hundred or hundred but not 3

(d) 6 374 1

B1 cao

[4]

08. (a) 3000 1

B1 for 3000 cao

(b) 4681 1

B1 for 4681 cao

(c) five thousand and sixty 1

B1 for five thousand and sixty

[3]

09. (a) 9374 1

B1 cao

(b) sixty two thousand five hundred 1

B1 cao

(c) 80 1

B1 for 80, accept 8 tens, tens

(d) 2200 1

B1 cao

(e) 7000 1

B1 cao

[5]

10. (a) 50000 1

B1 (accept ten thousand *or* 10 000*) oe*

(b) 0.9 1

B1 cao

[2]

11. (a) 350 000 1
B1

(b) (i) Twenty five thousand four hundred 1
B1 (accept 25 thousand 4 hundred)

(ii) 5 000 1
B1 (accept 5 thousand, thousand, 1000)

(c) (i) 26 000 1
B1

(ii) 25 700 1
B1

[5]

12. (a) 4062 1
B1

(b) 70 000 1
B1

(c) 2500 1
B1

[3]

13. (a) 19 482 1
B1 cao

(b) 7800 1
B1 accept seven thousand eight hundred

(c) 3 hundred 1
B1 accept 300 or three hundred

[3]

14. (a) Five thousand two hundred and sixty four 1
B1 accept 5 thousand 2 hundred and 60 four oe

(b) 5 300 1
B1 cao

(c) 60 1
B1 for 60 or sixty

[3]

15. B

[1]

16. C

[1]

17. (a) 3425 1

B1 for 3425 cao

(b) 40 1

B1 for 40 or forty or 4 tens or tens

(c) 300 1

B1 for 300 or 3 (hundred)

[3]

18. A

[1]

19. D

[1]

01. Mathematics A Paper 1

The majority had little trouble ordering the natural numbers in the first part but all the remaining parts proved much more demanding. In the second part, only a minority appreciated that 0.067 was the smallest number and, of those who did, many thought that 0.605 was greater than 0.65. The most common error in the third part was to reverse the order of the negative numbers. A large number of candidates scored 1 mark out of 2 in the final part as three of the numbers were in the correct order in their list e. g. $\frac{1}{2}, \frac{2}{5}, \frac{2}{3}, \frac{3}{4}$ but there was rarely any indication that equivalent fractions or conversion to decimals had been used.

Mathematics B Paper 14

Most candidates scored some marks on this question but few scored the full 5 marks. Parts (i) and (iii) were successfully answered by most candidates, although a common error for (iii) was to reverse the negative numbers giving –4, –6, –10, 2, 5. Very few got the decimals in the correct order in (ii). Part (iv) caused the most problems, with many ordering the denominators and only giving $\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \frac{2}{5}$ as their answer. Candidates mostly wrote their answer without any attempt to show working.

02. Part (a) was usually correctly answered though 50,000 was a common incorrect answer.
In part (b) answers of 50,000 or 10,000 were accepted and often seen. This part was not answered as well as part (a). About 25% of candidates gave fractional answers such as thousandths.

03. In general this question was well answered, with part (ii) usually correct. In part (i) some candidates had difficulty in placing 0.605 since they thought 0.065>0.65
In part (iii) most candidates gained at least 1, and many 2, marks. Methods varied, with some using equivalent fractions, and others making the conversion to decimals or percentages. It was very encouraging to see this done with much success.

04. A small minority of candidates did not understand what was wanted but many scored full marks. If an error were made, it was often in the last part, where 10 was popular.

05. **Specification A**

This was a gentle start to the paper for most candidates, although it was noticeable that some gave 7252 as the answer to the first part, presumably misreading the question. Rounding to the nearest hundred was well understood, as was place value.

Specification B

Many candidates scored some marks for this question. A common error in part (a) was to write 7252, missing out the initial 1. In part (b) many realised what was being asked but many rounded down to 5300.

06. This question was well answered with candidates gaining most success with parts (a), (b) and (d). Candidates often made mistakes with the rounding to the nearest hundred.

07. This question was well understood with most candidates scoring full marks despite some unusual spellings. Part (b) caused a few problems in correcting to the nearest thousand and some candidates lost marks on part (d) by writing 6324 or 6364 etc.

08. For the majority of candidates this question provided a successful start to the paper. Mistakes were made most often in part (a) where a common error was to round to the nearest hundred rather than to the nearest thousand. Some candidates rounded 3187 up to 4000. Part (b) was answered extremely well and in part (c) most candidates could write the number 5060 in words. Here, incorrect answers often began with 'five hundred' or 'fifty thousand'.

09. All parts of this question were answered well with success rates of well over 90% for the first two parts and of over 80% for the last 3 parts. Tenths or ten were commonly seen incorrect answers to part (c). There was some incorrect rounding in parts (d) and (e). A small minority of candidates did not rounded to the accuracy required.

10. In Part (a) many achieved the mark with different variations of 50 000. However few scored in part (b) with 1, 0.900 or 0.874 being the most common incorrect answer.

11. Candidates performed better on all parts of this question than in previous years although the spelling in (b) made interesting reading!
In part (b)(ii) the vast majority of candidates wrote either 5000 or 1000 in figures or words scoring the available mark.
Approximately half the candidates made correct responses to (c). However some candidates were tempted to abbreviate their answers [26 in (i) and 700 in (ii)] which meant they were not awarded the available mark.

12. Over 85% of candidates were able to correctly provide the digits 4062 in part (a) but were then unable to write down the value of the 7 in 76320. Only 38% were able to provide the answer of 70 000 or 10 000 in either words or figures or a combination of both to score the available mark. There was a 60% success rate with rounding to the nearest hundred with the most common incorrect responses being 3000 or 2600.

13. This question was well understood with candidates being about 80% successful in all three parts.

14. 93% of candidates were able to write 5264 in words but had a bit more difficulty when it came to rounding the number to the nearest hundred (76% success rate) with 5260, 5000 and 5200 being common incorrect answers to (b). 80% of the candidates could go on to write down the value of the 6 in the same number.

15. No Report available for this question.

16. No Report available for this question.

17. This question was very well answered with almost all candidates gaining the full 3 marks.

18. No Report available for this question.

19. No Report available for this question.