

Examination practice questions

You should have:

A ruler, protractor, compasses, a pen, pencil, eraser, calculator.
For some questions, you may need tracing paper.

Instructions

- Use **black** ink or ball-point pen.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- **Calculators may be used.**

Information

- The marks for each question are shown in brackets.
- If the number of marks for two similar questions isn't the same, this is likely due to them being modelled on different specifications. In this case, it is worth considering both mark schemes.
- Use the number of marks for each question as a guide as to how much time to spend on each question. As a rough guide, you can multiply the number of marks by 1.2 to see how many minutes you should spend on a question.
- Questions will generally get more challenging as the document progresses. Some of the latter questions will go beyond the core grade level for this topic.

Advice

- Read each question carefully before you start to answer it.
- Don't forget to have fun.
- Check your answers at the end.

Q1.

AtoZrevision.com

Ashley has these three number tiles.

2 3 8

Write down the three-digit number closest to 300 that can be made using all three of Ashley's tiles.

283

(1 mark)

Q2.

AtoZrevision.com

3 2 6 8

Write down the largest possible four digit number using all the digits that are in the box.

↳ Begin with largest digit

8632

(1 mark)

Q3.

AtoZrevision.com

Here are four cards.

Each card has a number on it.

The four cards are arranged to make the number 2745

2 7 4 5

Show how the cards can be arranged to make the smallest even number using all four cards.

2 5 7 4

2 even numbers.
larger value to go at the end to keep the number even.

(1 mark)

Q4.

Here are four cards.
Each card has a number on it.
The four cards are arranged to make the number 7358



Show how the four cards can be arranged to make the smallest number using all four cards.

3578

(1 mark)

Q5.

The table shows the depth of five ocean trenches.

Trench	Depth (metres)
Eurasian Basin	4437
Philippine	10540
Puerto Rico	8594
South Sandwich	8458
Tonga	10882

Which of these trenches has the greatest depth?

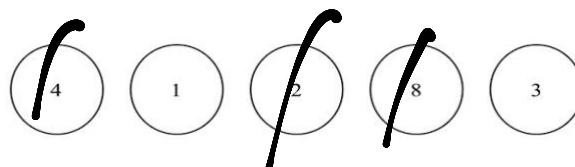
Tonga

TONGA

(1 mark)

Q6.

Here are five discs.
Each disc has a number on it.



These five discs are arranged to make the number 41283

Show how all five discs can be arranged to make the largest even number.

84312

(1 mark)

Q7.

AtoZrevision.com

The table shows the heights, in metres, of five mountains.

Mountain	Height (metres)
----------	-----------------

Aconcagua	6961
-----------	------

Makalu	8485
--------	------

Kilimanjaro	5895
-------------	------

Mont Blanc	4810
------------	------

Puncak Jaya	4884
-------------	------

largest

Which of these mountains has the greatest height?

MAKALU

(1 mark)

Q8.

AtoZrevision.com

3 8 9 1

Choose **three** of these number cards to make an **even** number that is **greater than 400**.

938 or 918

most pick 8

938

(1 mark)

Q9.

AtoZrevision.com

The table shows the distance, in kilometres, from London to each of five cities.

City	Distance (km)
------	---------------

Rio de Janeiro	9280
----------------	------

New York	5567
----------	------

Manila	10734
--------	-------

Sydney	16983
--------	-------

Kolkata	7962
---------	------

← smallest

Which of the five cities is nearest to London?

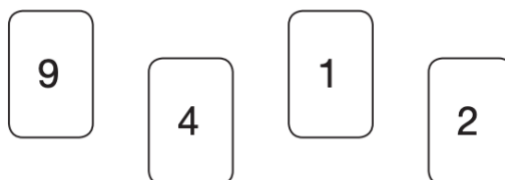
NEW YORK

(1 mark)

Q10.

AtoZrevision.com

Here are four digit cards



Use each digit card **once** to make the decimal number **nearest to 20**

19.42

(1 mark)

Q11.

AtoZrevision.com

Here are four digit cards.



Show all the different **two-digit numbers** that are **bigger than 30** that you can make using these cards.

You can use the cards more than once.

31, 32, 33, 34, 41, 42, 43, 44

(1 mark)

Q12.

AtoZrevision.com

Here are four digits.

8 2 4 3

Use three of these digits to make the three-digit number closest to 300.

284

(1 mark)

Q13.

AtoZrevision.com

Here are four digits.

5 1 7 9

Put one digit in each box to make the largest total. You may only use each digit once.

$$\boxed{7} \boxed{1} + \boxed{9} \boxed{5}$$

Write down the total.

OK
91 + 75 = 166

(1 mark)

Q14.

AtoZrevision.com

Josh writes down the whole numbers from 1 to 100
How many times does he write the digit 9?

Some of the numbers are shown to help you.

1 2 3 98 99 100

20

(1 mark)

Q15.

AtoZrevision.com

Here is some information about some washing machines.

Washing machine	Energy rating	Load (kg)	Spin speed (rpm)	Price (£)
Boss Excel	A+++	8	1400	399
ML Speedy	A+++	7	1200	329
Coolcross Wash	A+	7	1200	249
Niele EXA	A++	7	1400	686
ML Mini	A+	6	1400	479
Zen Slimfit	A++	7	1400	279

Write down the price of the cheapest washing machine.

£249

(1 mark)

Q16.

AtoZrevision.com

What number is 1,000 less than 9 072?

$$\begin{array}{r} 9072 \\ - 1000 \\ \hline 8072 \end{array}$$

8072

(1 mark)

Q17.

AtoZrevision.com

Jess ran a race in 54.34 seconds.

The winning time was 2 hundredths of a second less than her time.

What was the winning time?

54.32

(1 mark)

Q18.

AtoZrevision.com

Fiona has four cards.

Each card has a number written on it

4 9 1 5

Fiona uses the cards to make a true statement.

Write the number on the cards to make this true.

Use each of Fiona's cards once.

$$\boxed{a} + \boxed{b} = \boxed{c} \boxed{d}$$

$$9 + 5 = 1 + 4$$

$$5 + 9 = 1 + 4 \quad A_1$$

M, F -
attempting to
equate or
both sides.

(2 marks)

Q19.

AtoZrevision.com

Order the numbers starting with the **largest**.

1,009,909 , 1,023,065 , 1,009,099 , 1,230,650

1009099
1023065
1230650
1009099

M. E. an attempt to
order values /
two incorrect order

All correct

(2 marks)

Q20.

AtoZrevision.com

The number 6518 is divided by 100.

What is the value of the 6 in the answer?

$$\frac{6000}{100} = 60$$

60

(1 mark)

Q21.

AtoZrevision.com

The number 283 is multiplied by 10.

What is the value of the 2 in the answer?

2000

(1 mark)

Here are four number cards.



Layla uses each card once to make a four-digit number.

She places:

- 4 in the tens column
- 2 so that it has a higher value than any of the other digits
- the remaining two digits so that 7 has the higher value.

Show what Layla's number is.

M1 → two
digits in correct
place

A1
2743

.....
(2 marks)

QUESTIONS FROM MATHEMATICAL COMPETITIONS

Q23.

AtoZrevision.com

Which of these is closest to 7?

Tick the correct answer.

6.918
😊

- 7.09
- 6.918
- 7.17
- 6.66
- 7.085

Q24.

AtoZrevision.com

If the digit 4 is replaced by the digit 3 in each of the numbers below, which number is reduced by the largest amount?

Tick the correct answer.

Whichever number has a 4 in the highest place value column will be reduced by the highest amount.

- 45678
- 87654

Q25.

AtoZrevision.com

Kerry writes a list of all the integers from 1 to n on a whiteboard. She uses the digit 0 five times and the digit 9 six times. What is the value of n ?

Number is less than 60.
lowest value is 59.