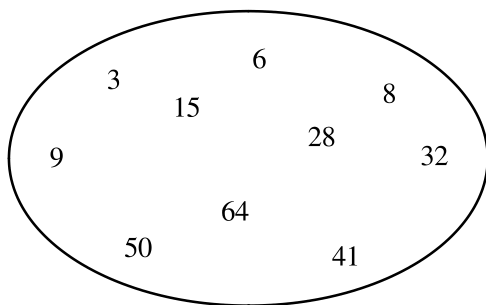


20 GCSE Number Foundation Questions 1

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**Question 1**



From the numbers in the ring write down all the

- (a)** square numbers
- (b)** cube numbers
- (c)** prime numbers
- (d)** factors of 56

**(2 marks)**

**(2 marks)**

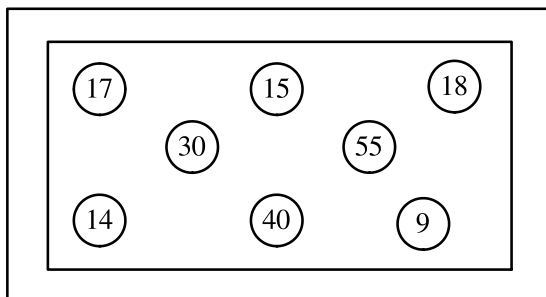
**(2 marks)**

**(2 marks)**

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**Question 2**

Here is a card



From the numbers on the card, write down all the numbers that

**(a)** 5 will divide into exactly

**(2 marks)**

**(b)** 3 will divide into exactly

**(2 marks)**

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**Question 3**

Use a calculator to work out

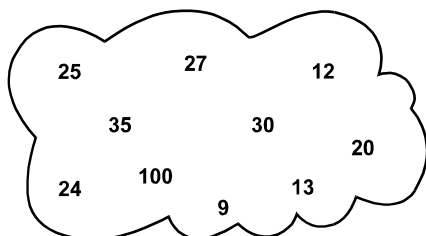
$$15.2 \times \sqrt{10.24} - 3.62$$

**(3 marks)**

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**Question 4**

From the numbers in the cloud,



write down:

- i) those numbers that 2 will divide into exactly,
- ii) those numbers that 10 will divide into exactly,
- iii) the number which is double one of the other numbers.

---

**Question 5**

Complete the table for number 272.

Ways of getting 192
$12 \times 16 = 192$
$24 \times 8 = 192$
$48 \times 4 = 192$
$96 \times 2 = 192$

Ways of getting 272
$17 \times 16 = 272$
$34 \times \dots = 272$
$68 \times \dots = 272$
$\dots \times \dots = 272$

---

**Question 6**

Write down two different pairs of numbers that multiply together to make 24.

---

**Question 7**

From the numbers in the rectangle

12	24	60
36	54	
27	9	13

write down all of the:

- i) odd numbers,
- ii) numbers that are factors of 72,
- iii) numbers that are multiples of 9,
- iv) prime numbers.

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**Question 8**

Tickets for a concert cost £3 each.  
Ramana has £17.

Work out the greatest number of tickets that Ramana can buy.

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**Question 9**

Write down the next two prime numbers greater than 13

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**Question 10**

Mr. Young sold 254 tickets for the year 11 Disco.

He estimates that each person will drink 2 cans of cola.

The cola is sold in cases of 48 cans.

Write down a calculation that Mr. Young could use to estimate the number of cases of cola that he needs to buy.

---

**Question 11**

**Do NOT use a calculator for this question.**

**You must show all your working.**

Work out  $453 \times 73$ .

---

**Question 12**

Mrs. Evans decides to take 863 students on a trip to Euro Disney.

They travel by coach.

Each coach can hold up to 51 students.

In this part of the question you **MUST NOT** use a calculator.

You **MUST** show **ALL** your working

- (a) Work out the smallest number of coaches Mrs. Evans should book so that all the students can go on the trip.

Each student has to pay £37 for the trip.

745 students decide to go on the trip.

In this part of the question you **MUST NOT** use a calculator.

You **MUST** show **ALL** your working

- (b) How much money is collected if all 745 students pay £37 each.

The trip actually cost £25 000

- (c) Use your calculator to work out the percentage profit that Mrs. Evans will make on the trip.

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**Question 13**

- i) Write down two numbers you could use to estimate the answer to  $793 \div 21$

- ii) Work out your estimate.

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**Question 14**

Joy works for 35 hours and gets paid £2.50 per hour.  
She pays income tax of £3.75 and National Insurance of £1.75.  
She earns a bonus of £5.  
Work out her take home pay.

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**Question 15**

Tickets for a football match cost £4.70 each.  
(a) How much will 100 tickets cost?

Children can buy tickets at half price.  
Mr. and Mrs. Smith and their two children buy tickets.  
(b) Work out the total cost of the tickets.

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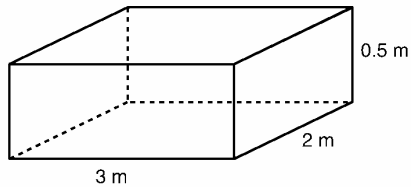
**Question 16**

Petrol costs 62p per litre.  
Work out the cost of 12 litres.

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**Question 17**

The diagram below shows a metal box. The box is a cuboid.



- (a) Work out the volume, in  $\text{m}^3$ , of the box

Shitem deliver these boxes in the UK.

They charge £25.85 for each  $\text{m}^3$  of a box's volume.

- (b) Work out Shitem's charge for delivering one of these boxes.

The weight of a box is 0.125 tonnes.

- (c) Write 0.125 tonnes in kg.

Le Goff deliver these boxes to Paris.

They charge 7.92 French francs for each kg.

- (d) Work out Le Goff's charge, in French francs, for delivering one of these boxes.

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**Question 18**

Michelle goes to France for her holiday.

She changes £80 into French francs.

The exchange rate is £1 = 9.50Ff

How many French francs should Michelle receive?



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**Question 19**

It normally takes Sylvie 20 minutes to drive to work.  
One day Sylvie has to drive at half her normal speed.  
How long does it take her to drive to work on that day?

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**Question 20**

- (a) Work out the cost of 5 Breakfasts.

Sam's Cafe	
<i>Cup of Tea</i>	80p
<i>Cup of Coffee</i>	90p
<i>Breakfast</i>	£2.95
<i>Today's Special</i>	£4

Dara buys some cups of tea.

- (b) Work out the greatest number of cups of tea she can buy with £5.

A child's meal cost  $\frac{7}{10}$  of the price of Today's Special.

- (c) Work out the cost of a child's meal.