Q1. Mental Maths

1. Without actually dividing, state the remainder when:

a) 789 is divided by 10. _9_

b) 5,432 is divided by 100. _32_

c) When a number is divided by 1, the quotient is the _The No. itself._

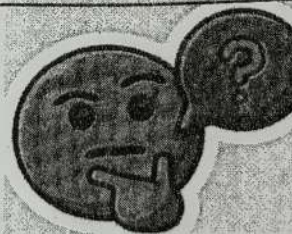d) When a non-zero number is divided by itself, the quotient is _1_.

Q2. A number when divided by 15 gives a quotient of 23 and a remainder of 7. Find the number.

(Recall: Dividend = Divisor times Quotient + Remainder).

Divisor = 15
Quotient = 23
Remainder = 7

So (15×23) + 7
345 + 7
= 352

Q3. The Mystery Number Chain:

I start with a number. I divide it by 7, and the quotient is 15 with a remainder of 3. What was my starting number? If I then divide that starting number by 10, what will be the quotient and remainder?

(Divisor × Quotient) + Remainder = Divident
= (7×15) + 3
= 105 + 3
= 108

If we divide the starting no. by 10 then, 108 ÷ 10

Quotient = 10
Remainder = 8

Q4. The Birthday Candles:

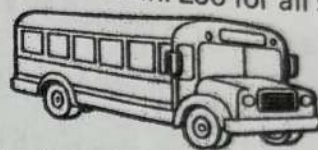Ria bought 170 candles. She needs to put 15 candles on each birthday cake.

a) How many cakes can she decorate? __11__ $(170 \div 15)$

b) After decorating the cakes, how many candles will she have left? __$170-165 = 5$__

c) How many more candles does she need to decorate one more cake?
__10 candles__ $(15-5)$

Q5. Case study

Scenario:

The teachers of ABC Primary School are planning a field trip to the Delhi Zoo for all students from Class 5. There are a total of 360 students in Class 5.

The school has decided on the following arrangements:

* Transportation: Buses will be hired. Each bus has a seating capacity of 45 students.

* Supervision: For every 15 students, there must be 1 teacher to supervise.

* Lunch: Each student will receive a lunch packet. The school budget allows Rs. 75 for each student's lunch packet.

* Entry Tickets: The entry ticket to the zoo costs Rs. 60 per student. Teachers get free entry.

Questions:

Read the case study carefully and use division (and other operations if needed) to answer the following questions. Show all your calculations.

a) How many buses will the school need to hire to transport for all the Class 5 students to the zoo? __$360 \div 45 = 8$ buses__

b) How many teachers will be required for supervision during the field trip? __$360 \div 15 = 24$ teacher__

c) If the school paid a total of Rs. 27,000 for all the students' lunch packets, what was the cost of one lunch packet? __$27000 \div 360 = $ Rs 75__

d) What is the total cost of entry tickets for all the Class 5 students? __$60 \times 360 = 21600$__

Q. Find the missing numbers


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          1  [6]  2
      4 ) 6   4   8
         -4   ↓
         [2]  4
        - 2   4
          0   0   8
        -[ ] [ ] [8]
          0   0   0
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Rough work