EXERCISE 5(E) PAGE NO: 42

1. Find the difference between the largest number of four digits and the smallest number of six digits.

Solution:

Largest number of 4 digits = 9999
Smallest number of 6 digits = 100000
Their difference = 100000 – 9999
= 90001
Therefore, the difference between the largest number of four digits and the smallest number of six digits = 90001

2. Find the difference between the smallest number of eight digits and the largest number of five digits.

Solution:

Smallest number of eight digits = 10000000
Largest number of five digits = 99999
Their difference = 10000000 – 99999
= 9900001
Hence, the difference between the smallest number of eight digits and the largest number of five digits is 9900001

3. The product of two numbers is 528. If the product of their unit's digits is 8 and the product of their ten's digits is 4; find the numbers.

Solution:

Given the product of unit's digits = 8 i.e., 2 × 4
Hence, unit's digits are 2 and 4
So, the numbers are either 24 or 22
24 × 22 = 528
The required numbers are 528

4. Does there exist a number a such that a ÷ a = a?

Solution:

Yes and the number a is 1
a ÷ a = a
1 ÷ 1 = 1

5. Divide 5936 by 43 to find the quotient and remainder. Also, check your division by using the formula, dividend = divisor × quotient + remainder

Solution:

On dividing 5936 by divisor 43, we get the quotient 138 and the remainder 2

43	5936	138
-	43	
	163	
-	129	
	346	
-	344	
	2	

Verification:
Dividend = divisor × quotient + remainder
5936 = 43 × 138 + 2
5936 = 43 × (100 + 38) + 2
= 4300 + 1634 + 2
= 5936
Therefore, verified.