Q1. Which of the following will not represent zero:

(a) 1 + 0

(b) 0 x 0

(c) 0/2

(d) 10-10/2

Ans: (a) [1 + 0 is equal to 1]

Q2. If the product of two whole numbers is zero, can we say that one or both of them will be zero? Justify through examples.

Ans: Yes, if we multiply any number with zero the resultant product will be zero.

Example: 2 x 0 = 0, 5 x 0 = 0, 9 x 0 = 0

If both numbers are zero, then the result also be zero.

0 x 0 = 0

Q3. If the product of two whole number is 1, can we say that one or both of them will be 1? Justify through examples.

Ans:

If only one number be 1 then the product cannot be 1.

Examples: 5 x 1 = 5, 4 x 1 = 4, 8 x 1 = 8

If both number are 1, then the product is 1

1 x 1 = 1

Q4. Find using distributive property:

(a) 728 x 101

(b) 5437 x 1001

(c) 824 x 25

(d) 4275 x 125

(e) 504 x 35

Ans:

(a) 728 x 101

= 728 x (100 + 1)

= 728 x 100 + 728 x 1

= 72800 + 728

= 73528

(b) 5437 x 1001

= 5437 x (1000 + 1)

= 5437 x 1000 + 5437 x 1

= 5437000 + 5437

= 5442437

(c) 824 x 25

= 824 x (20 + 5)

= 824 x 20 + 824 x 5

= 16480 + 4120

= 20600

(d) 4275 x 125

= 4275 x (100 + 20 + 5)

= 4275 x 100 + 4275 x 20 + 4275 x 5

= 427500 + 85500 + 21375

= 534375

(e) 504 x 35

= (500 + 4) x 35

= 500 x 35 + 4 x 35

= 17500 + 140

= 17640

Q5. Study the pattern:

1 x 8 + 1 = 9;

12 x 8 + 2 = 98;

123 x 8 + 3 = 987

1234 x 8 + 4 = 9876;

12345 x 8 + 5 = 98765

Write the next two steps. Can you say how the pattern works?

Ans:

123456 x 8 + 6 = 987654

1234567 x 8 + 7 = 9876543

Pattern works like this:

1 x 8 + 1 = 9

12 x 8 + 2 = 98

123 x 8 + 3 = 987

1234 x 8 + 4 = 9876

12345 x 8 + 5 = 98765

123456 x 8 + 6 = 987654

1234567 x 8 + 7 = 9875643

********** END *********