Indian Math Online – Solution Explanation
Multiplication

How many crayons are there in one box? 6
How many boxes are there? 3
How many crayons are there altogether? 6 + 6 + 6 = 18
We added 6 three times to find the total number of crayons.
Thus, 6 taken 3 times is equal to 18.
We say, 6 × 3 = 18 Or, 6 multiplied by 3 is equal to 18.
6 × 3 = 18 is a multiplication fact ['×' is the symbol of multiplication and 18 is called the product]

Each bunch has 3 cherries.
Total cherries = 3 + 3 + 3 + 3 + 3 = 15 [3 is added repeatedly 5 times]
Now, 3 + 3 + 3 + 3 + 3 is same as 3 × 5
Similarly, 2 × 3 is same as 2 + 2 + 2
7 × 4 is same as 7 + 7 + 7 + 7

Examples:

Q.1. 1 × 5 = 5 + 5 + 5 + 5 + 5
- True
- False

Explanation: 1 × 5 is 1 added 5 times i.e. 1 + 1 + 1 + 1 + 1
So, the above statement is false.

Q.2. Add 2 eight times.
Explanation: 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = 2 × 8 = 16

Q.3. How many wheels are there in 4 bicycles?

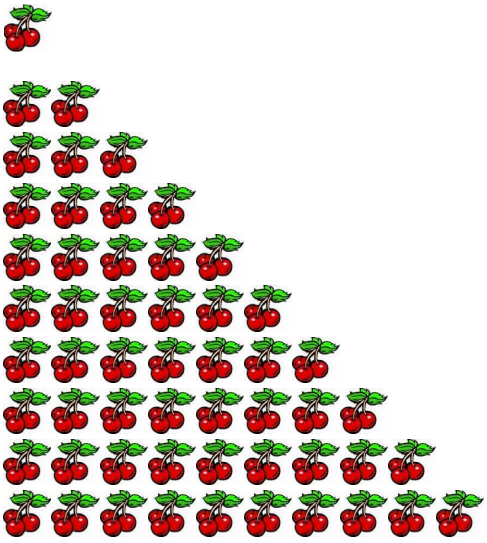
Explanation: A bicycle has 2 wheels. 

Four bicycles will have 2 + 2 + 2 + 2 = 2 × 4 = 8 wheels

Multiplication table of 2

2	2 × 1 = 2
2 + 2	2 × 2 = 4
2 + 2 + 2	2 × 3 = 6
2 + 2 + 2 + 2	2 × 4 = 8
2 + 2 + 2 + 2 + 2	2 × 5 = 10
2 + 2 + 2 + 2 + 2 + 2	2 × 6 = 12
2 + 2 + 2 + 2 + 2 + 2 + 2	2 × 7 = 14
2 + 2 + 2 + 2 + 2 + 2 + 2 + 2	2 × 8 = 16
2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2	2 × 9 = 18
2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2	2 × 10 = 20

Multiplication table of 3



3	3 × 1 = 3
3 + 3	3 × 2 = 6
3 + 3 + 3	3 × 3 = 9
3 + 3 + 3 + 3	3 × 4 = 12
3 + 3 + 3 + 3 + 3	3 × 5 = 15
3 + 3 + 3 + 3 + 3 + 3	3 × 6 = 18
3 + 3 + 3 + 3 + 3 + 3 + 3	3 × 7 = 21
3 + 3 + 3 + 3 + 3 + 3 + 3 + 3	3 × 8 = 24
3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3	3 × 9 = 27
3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3	3 × 10 = 30

Similarly, the multiplication tables for numbers up to 10 are as follows:

4 × 1 = 4	5 × 1 = 5	6 × 1 = 6	7 × 1 = 7	8 × 1 = 8
4 × 2 = 8	5 × 2 = 10	6 × 2 = 12	7 × 2 = 14	8 × 2 = 16
4 × 3 = 12	5 × 3 = 15	6 × 3 = 18	7 × 3 = 21	8 × 3 = 24
4 × 4 = 16	5 × 4 = 20	6 × 4 = 24	7 × 4 = 28	8 × 4 = 32
4 × 5 = 20	5 × 5 = 25	6 × 5 = 30	7 × 5 = 35	8 × 5 = 40
4 × 6 = 24	5 × 6 = 30	6 × 6 = 36	7 × 6 = 42	8 × 6 = 48
4 × 7 = 28	5 × 7 = 35	6 × 7 = 42	7 × 7 = 49	8 × 7 = 56
4 × 8 = 32	5 × 8 = 40	6 × 8 = 48	7 × 8 = 56	8 × 8 = 64
4 × 9 = 36	5 × 9 = 45	6 × 9 = 54	7 × 9 = 63	8 × 9 = 72
4 × 10 = 40	5 × 10 = 50	6 × 10 = 60	7 × 10 = 70	8 × 10 = 80

9 × 1 = 9	10 × 1 = 10
9 × 2 = 18	10 × 2 = 20
9 × 3 = 27	10 × 3 = 30
9 × 4 = 36	10 × 4 = 40
9 × 5 = 45	10 × 5 = 50
9 × 6 = 54	10 × 6 = 60
9 × 7 = 63	10 × 7 = 70
9 × 8 = 72	10 × 8 = 80
9 × 9 = 81	10 × 9 = 90
9 × 10 = 90	10 × 10 = 100

Examples:

Q.1. Joe swims 7 days a week. How many days does he swim in 4 weeks?

- 32
- 21
- 28

Explanation: In 1 week, Joe swims 7 days.
In 4 weeks he'll swim (7 + 7 + 7 + 7) days or (7 × 4) days.
Refer to multiplication table of 7.
So, correct answer is 28 days.

Q.2. Find the product of 9 and 6

- 69
- 63
- 64
- 54

Explanation: We have to find 9 × 6. Refer the multiplication table of 9.
So, correct answer is 54.

Q.3. 8 × 3 = 6 × 4

- True
- False

Explanation: Refer to multiplication tables of 8 and 6.
8 × 3 = 24
And 6 × 4 = 24
So the above statement is true.

Q.4. Fill in the blanks to complete the pattern:
5, 10, 15, 20, 25, _____, _____

- 30, 35
- 40, 50
- 30, 40

Explanation: We see a pattern of multiplication table of 5 is followed (refer tables of 5).
5 × 1 = 5
5 × 2 = 10
5 × 3 = 15
5 × 4 = 20
5 × 5 = 25
Next comes 5 × 6 = 30 and 5 × 7 = 35

Q.5. Fill in the missing numeral
28 = 7 x _____

- 3
- 4
- 2

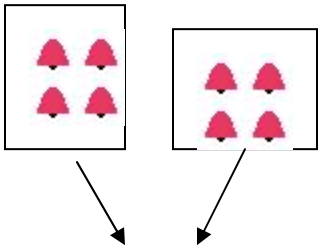
Explanation: Refer to table of 7. 7 × 4 = 28
So, 4 is the answer.

Points to remember

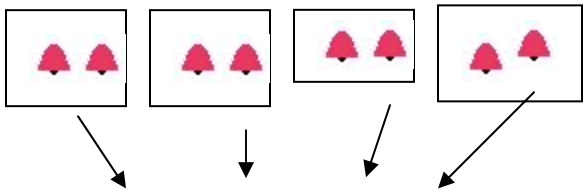
1. Any number multiplied with 1 will equal the number itself.
We know that, 1 + 1 + 1 + 1 + 1 + 1 = 6 × 1 = 6

2. Any number multiplied with zero equals to zero.
We know that, 0 + 0 = 0.
Thus, 0 taken 4 times = 0
0 × 4 = 0

3. Two or more numbers can be multiplied in any order. Their product remains the same.



4 + 4 = 8
Or, 4 × 2 = 8



2 + 2 + 2 + 2 = 8
or, 2 × 4 = 8

Examples:

Q.1. 9 × 5 = 5 × 9
- True
- False

Explanation: We know, when two numbers are multiplied their order doesn't affect the product.
9 × 5 = 45
And, 5 × 9 = 45
So, the above statement is true.

Q.2. Fill in the blank
20 = _____
- 2 + 0
- 2 × 0
- 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2
- 2 × 10

Explanation: 2 + 0 = 2
2 × 0 = 0
2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = 16
2 × 10 = 20