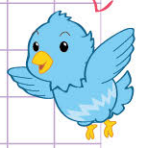
Name: ..... Class: .....

How to find two numbers based on product and quotient

1. The product of two numbers a and b is 6. Their difference is 1 find a and b.

2. The sum of two numbers a and b is 32. Their quotient is 7. Find a and b.



Solution

mathskills4kids

Name: ..... Class: .....

How to find two numbers based on product and quotient

1. The product of two numbers a and b is 6. Their difference is 1 find a and b.

Let's try to think of two pairs of numbers whose differences is 1

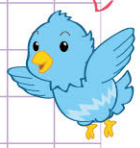
1 - 0 = 1	4 - 3 = 1
2 - 1 = 1	5 - 4 = 1
3 - 2 = 1	6 - 5 = 1

Now, pick out two pairs of numbers from above with a product of 6

1 x 0 = 0	4 x 3 = 12
2 x 1 = 2	5 x 4 = 20
3 x 2 = 6	6 x 5 = 30

You see that, 3 and 2 gives a product of 6.

So, a = 3 and b = 2.



2. The sum of two numbers a and b is 32. Their quotient is 7. Find a and b.

Let's try to think of two pairs of numbers whose difference is 32.

31 + 1 = 32	26 + 6 = 32
30 + 2 = 32	29 + 3 = 32
27 + 5 = 32	28 + 4 = 32

Now, pick out two pairs of numbers from above with a quotient of 7.

31 ÷ 1 = 1	28 ÷ 4 = 7
30 ÷ 2 = 15	27 ÷ 5 = 5 R 2
29 ÷ 3 = 9 R 2	

You see that, 28 and 4 gives a quotient of 7.