Multiplication and Division 2 Answers

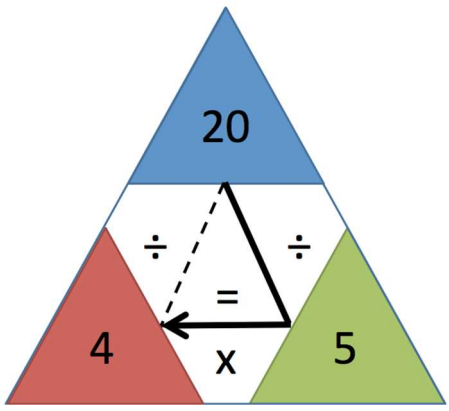
L.O. To know multiplication and division facts (x4).

Quiz!
Fill in the blanks with the missing numbers from the 4 times table (try counting on if you get stuck):

4 8 ___ 16 20 24 28 ___ 36 40 44 ___

DI
Multiplication and division are closely related, given that division is the **inverse** operation of multiplication. When we **divide**, we look to **separate** into **equal groups**, while **multiplication** involves **joining equal groups**.

We'll start with a multiplication question (remember in yesterday's lesson when I said if we learn our times tables it will make other maths easier!!): if we can answer **4 x 5 = 20**, its **inverse** (in the form of division) will be the following:



20 ÷ **5** = 4
20 ÷ **4** = 5

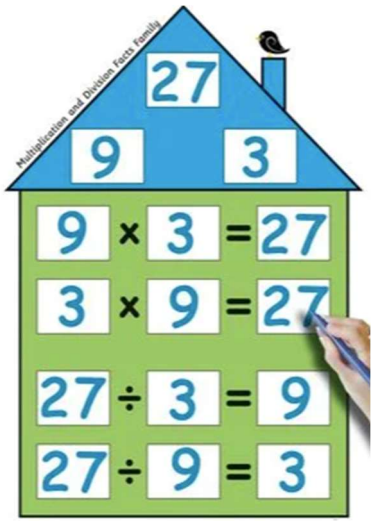
In the same way, if we take the division **20 ÷ 5 = 10**, its **inverse** (in the form of multiplication) will be the following:

4 x 5 = 20
5 x 4 = 20

In both examples, we can see that we use the **same three numbers**. This is because when we multiply two numbers (which we call factors), we get a result that we call a product.

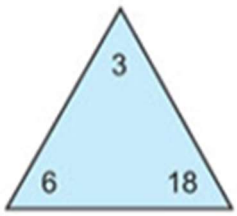
Just as if we divide a product by one of its factors, we get the other factor as a result.

We can think of numbers the numbers that we are multiplying and dividing as **fact families** – like when you have a full house of people visiting and you have to work out where everyone is sleeping.

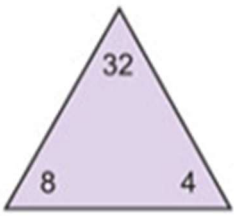


Watch the following clip for further explanation:
https://www.bbc.co.uk/teach/class-clips-video/maths-ks1--ks2-how-to-use-mental-methods-to-divide/zvg6nrd

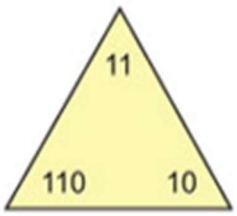
GP
You will find that if you know one number fact, you can use it to make at least three related statements!



6 x 3 = ____
3 x 6 = ____
18 ÷ 3 = ____
18 ÷ 6 = ____



____ x ____ = ____
____ x ____ = ____
____ ÷ ____ = ____
____ ÷ ____ = ____



____ x ____ = ____
____ x ____ = ____
____ ÷ ____ = ____
____ ÷ ____ = ____

6 x 3 = 18
3 x 6 = 18
18 ÷ 3 = 6
18 ÷ 6 = 3

4 x 8 = 32
8 x 4 = 32
32 ÷ 4 = 8
32 ÷ 8 = 4

10 x 11 = 110
11 x 10 = 110
110 ÷ 10 = 11
110 ÷ 11 = 10

IP

1. $12 \div 4 = 3$
$12 \div 3 = 4$
$3 \times 4 = 12$
$4 \times 3 = 12$

2. $48 \div 4 = 12$
$48 \div 12 = 4$
$4 \times 12 = 48$
$12 \times 4 = 48$

3. $4 \times 8 = 32$
$8 \times 4 = 32$
$32 \div 4 = 8$
$32 \div 8 = 4$

4. $9 \times 4 = 36$
$4 \times 9 = 36$
$36 \div 4 = 9$
$36 \div 9 = 4$

5. $44 \div 4 = 11$
$44 \div 11 = 4$
$4 \times 11 = 44$
$11 \times 4 = 44$

6. $24 \div 4 = 6$
$24 \div 6 = 4$
$4 \times 6 = 24$
$6 \times 4 = 24$