![Great MathWorksheets]

Math Practice Sheets

Introduction to Fraction Concepts

Examples

Practice Questions

Extra Challenge Unit

Student Name

_____

<table>
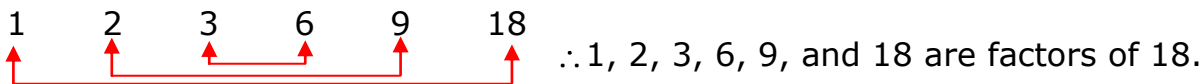<tr><td>Unit
8.1</td><td># Factors and Multiples</td></tr>
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Example

Factors: Integers that are multiplied together to find a product are called factors of that product. A number is divisible by any of its factors.

$$3 \cdot 4 = 12$$
factor   Product

$$12 \div 4 = 3$$
$$12 \div 3 = 4$$
12 is divisible by 4 and 3.

List all the factors of 18. Begin listing factors in pairs.

18 = 1.18	1 is a factor.
18 = 2.9	2 is a factor.
18 = 3.6	3 is a factor.
	4 is not a factor.
	5 is not a factor.
18 = 6.3	6 and 3 have already been listed, so stop here.

You can draw a diagram to illustrate the factors pairs.

1   2   3   6   9   18   ∴ 1, 2, 3, 6, 9, and 18 are factors of 18.

Similarly, the product 12 is called a multiple of the number 3.
12 is also a multiple of 4. We can obtain as many as multiples of 3 as we please by multiplying the number 3 by 1 and then by 2 and then by 3 and so on. i.e. 3 × 1 = 3, 3 × 2 = 6, 3 × 3 = 9.......
So, the multiples of 3 are 3, 6, 9, 12...........

Exercise

1. List all the factors of each of the following.

a) 12

b) 15

c) 21

d) 28

e) 42

f) 52

g) 63

h) 75