## Alpha Exercise 1

**List all the factors of each of these numbers:**

1)     1:     ____

2)     2:     ____ ____

3)     3:     ____ ____

4)     4:     ____ ____ ____

5)     8:     ____ ____ ____ ____

6)     15:     ____ ____ ____ ____

## Alpha Exercise 2

**List all the factors of each of these numbers:**

1)     10:     ____ ____ ____ ____

2)     6:     ____ ____ ____ ____

3)     9:     ____ ____ ____

4)     17:     ____ ____

5)     12:     ____ ____ ____ ____ ____ ____

6)     24:     ____ ____ ____ ____ ____ ____ ____ ____

## Beta Exercise 1

**List all the factors of each of these numbers:**

1)     36:     ____ ____ ____ ____ ____ ____ ____ ____ ____

2)     45:     ____ ____ ____ ____ ____ ____

3)     57:     ____ ____ ____ ____

4)     43:     ____ ____

5)     39:     ____ ____ ____ ____

6)     84:     ____ ____ ____ ____ ____ ____ ____ ____ ____ ____ ____ ____

## Beta Exercise 2

**List all the factors of each of these numbers:**

1)     18

2)     20

3)     27

4)     75

5)     63

6)     54

## Gamma Exercise 1

**Find the highest common factor of each of these pairs of numbers:**

1)     4 and 18

2)     15 and 20

3)     9 and 27

4)     50 and 75

5)     18 and 63

6)     54 and 90

## Gamma Exercise 2

**Find the highest common factor of each of these sets of numbers:**

1)     3 and 14

2)     25 and 15

3)     21, 35 and 42

4)     55 and 77

5)     10, 15 and 25

6)     210 and 525

## Explain the mistake

Sophia writes:

28 is a factor of 7 because 7 goes 4 times into 28.

**Sophia's sentence is incorrect.** How would you correct it?

## Exam-style question 1

(a) Write all the factors of 56.

(b) Find the highest common factor of 56 and 28.

(c) Find the highest common factor of 56, 28 and 21.

# Exam-style question 2

The highest common factor of 42 and 105 is 21.

Write $\dfrac{42}{105}$ as a fraction in its simplest form.