



**Arithmetics, HCF**  
**Exercices sheet**

**Exercise 1:** Given that  $a = \frac{3}{2}$ ,  $b = -5$ ,  $c = \frac{2}{3}$

a) Calculate :  $A = a + b - c$        $B = a - (b - c)$        $C = a \times \frac{b}{c}$

b) One of these results is a decimal number. Which one?

**Exercise 2:** Given that  $a = 2$ ,  $b = -\frac{3}{4}$ ,  $c = \frac{1}{6}$ , say if each statement is true or false, justifying your answer.

- a)  $\frac{a-b}{c}$  is decimal
- b)  $\frac{a}{b-c}$  is irrational
- c)  $\frac{b}{a \times c}$  is a non decimal rational number

**Exercise 3:** A rectangular garden is  $\frac{4}{5}$  hm long and  $\frac{1}{4}$  hm wide.

- a) Calculate its perimeter in hectometers
- b) Calculate its area in hectometers squared

*Give your results first as fractions, then as decimals.*

**Exercise 4:** Rewrite each sentence using the word “multiple”

- a) 15 is a factor of 45
- b) 35 is divisible by 5

**Exercise 5:** Rewrite each sentence using the word “factor”

- a) 12 is divisible by 4
- b) 132 is a multiple of 11

**Exercise 6:** Write a sentence about each equality using the words “multiple” or “factor”

- a)  $\frac{58}{2} = 29$
- b)  $36 \times 7 = 252$

**Exercise 7:**

Write a list of the factors of each of the two numbers and deduce their HCF.

- a) 36 and 54                      b) 63 and 64                      c) 60 and 96

**Exercise 8:**

Explain why 7 cannot be the HCF of 154 and 3780

**Finding the HCF: Activity**

In each case, write the list of factors of the two numbers to find their common factors :

- 1. Factors of 96 :.....  
    Factors of 28 :.....  
    Common factors of 96 and 28 :.....
- 2. Factors of 68 (68 = ..... ) :.....  
    Factors of 28 :.....  
    Common factors of 60 and 28 : .....
- 3. Factors of 40 (40 = ..... ) :.....  
    Factors of 28 :.....  
    Common factors of 40 and  
    28 :.....

**Etc. ? .....**

4. Complete the following equalities :

What do you notice ?

HCF(96 ;28) =  
HCF(68 ;28) =  
 HCF(40 ;28) =  
 ..... =  
 ..... =  
 ..... =  
 ..... =