

There are certain digits in numbers that are considered important or contribute to the value of the number. They are referred to as 'significant figures'. Significant figures are often used in math, science and measurements. It is a way of describing the accuracy of a number. Here are some rules regarding significant figures:

**SIGNIFICANT**

- a) Digits are significant if they are non-zero digits (241 has three significant figures)
- b) A zero is significant if it appears between two non-zero digits (401 has three significant figures)
- c) Zeros after the decimal point are significant (52.500 has 5 significant figures)

**NOT SIGNIFICANT**

- a) For decimal numbers, leading zeros are NOT significant (0.00036 has 2 significant figures: 3 and 6)
- b) for whole numbers, trailing numbers are not significant (1300 has 2 significant figures)



1. Write **YES** or **NO** to tell whether the **zero(s)** in each number below is SIGNIFICANT:

- a) \_\_\_\_ 60      b) \_\_\_\_ 105      c) \_\_\_\_ 1.60      d) \_\_\_\_ 0167      e) \_\_\_\_ 0.6  
 f) \_\_\_\_ 051      g) \_\_\_\_ 2015      h) \_\_\_\_ 0.0006      i) \_\_\_\_ 0016      j) \_\_\_\_ 520.1

2. Write the number of significant figures in the following numbers:

- a) \_\_\_\_ 1.020      b) \_\_\_\_ 0.003      c) \_\_\_\_ 52.60      d) \_\_\_\_ 100.0010      e) \_\_\_\_ 001.20  
 f) \_\_\_\_ 50100      g) \_\_\_\_ 1001      h) \_\_\_\_ 602.40      i) \_\_\_\_ 12400      j) \_\_\_\_ 0.00260  
 k) \_\_\_\_ 00.002      l) \_\_\_\_ 26.30      m) \_\_\_\_ 10201      n) \_\_\_\_ 20.001      o) \_\_\_\_ 05.010

3. Write the number of significant figures in the following numbers:

- a) \_\_\_\_ 300      b) \_\_\_\_ 12000      c) \_\_\_\_ 2.0500      d) \_\_\_\_ 200.02      e) \_\_\_\_ 0602.01  
 f) \_\_\_\_ 50      g) \_\_\_\_ 013.04      h) \_\_\_\_ 2.60      i) \_\_\_\_ 00.300      j) \_\_\_\_ 10.01  
 k) \_\_\_\_ 1000      l) \_\_\_\_ 0013.0      m) \_\_\_\_ 01.050      n) \_\_\_\_ 0.00060      o) \_\_\_\_ 010.01

4. Express the number 1105 to

- a) 3sf \_\_\_\_\_      b) 1sf \_\_\_\_\_      c) 4sf \_\_\_\_\_      d) 2sf \_\_\_\_\_

5. Express the number 0.026 to

- a) 1sf \_\_\_\_\_      b) 5sf \_\_\_\_\_      c) 3sf \_\_\_\_\_      d) 2sf \_\_\_\_\_

6. In the table below, write the number on the left to the correct number of significant figures indicated

a)

	1sf	2sf	3sf
144			
13515			
2591			
27			
268			
37910			
2601			
25060			

b)

	1sf	2sf	3sf
0.25			
2.069			
25.4			
1.002			
0.00256			
0.03925			
25.0135			
637.3			