

## BASIC MATHS

### 4 basic operations

symbol	interpretation	operation	result	numerical expression	verbal expression
+	plus, add	addition	sum	$2+2=4$	two plus two equals four
-	minus, less, subtract from	subtraction	difference	$5-3=2$	five minus three equals two
*	multiplied by, times	multiplication	product	$6 \times 7 = 42$	six times seven is forty-two
/	divided by, over	division	quotient	$4 \div 5 = 4/5$	four divided by five is four fifths
=	equals, is				

### Fractions:

$5\frac{1}{2}$  = five and a half

$\frac{1}{4}$  = a quarter

$\frac{4}{5}$  = four fifths

$\frac{2}{3}$  = two thirds

$\frac{1}{8}$  = one eighth

$\frac{1}{3}$  = a third

$\frac{3}{8}$  = three eighths

$\frac{3}{4}$  = three quarters

$\frac{6}{7}$  = six sevenths

$1\frac{2}{3}$  = one and two thirds

We use a singular verb after fractions: *Three quarters of a ton is too much.*

### Decimals

0.125 (nought) point one two five

3.7 three point seven

0.1 (nought) point one/ (zero) point one

1.25	one point two five
2.1368	two point one three six eight
1.057	one point oh five seven
4.0098	four point zero zero nine eight

### Spoken calculations

Common ways of calculating are:

- $2 + 2 = 4$  *two and two is/are four* (informal)  
*two plus two equals four* (formal)
- $7 - 4 = 3$  *four from seven is three* (informal)  
*seven minus four equals three* (formal)
- $3 \times 4 = 12$  *three times four are twelve* (informal)  
*three multiplied by four equals twelve* (formal)
- $9 / 3 = 3$  *nine divided by three equals three*

### Other operations on numbers:

$4^2 =$  four squared

$7^3 =$  seven cubed

$2^3 =$  2 to the 3rd power

$\sqrt{3}$  – square root of 3

$\sqrt{\quad}$  - root, radical sign

$\log_3 9$  – logarithm to the base 3 of 9

prime factor – czynnik pierwszy

order of operations – kolejność działań

to factorize a numer – rozłożyć liczbę na czynniki

odd number – liczba nieparzysta

even numer – liczba parzysta

60% = sixty per cent