Numbers and the number system

Pearson Edexcel · International GCSE · Mathematics A · Vocabulary in context

Word	Example
factor /ˈfæktə/	3 is a **factor** of 12. 3 12
multiple /ˈmʌltɪpl/	12 is a **multiple** of 3. 12 3
prime number /praɪm ˈnʌmbə/	7 is a **prime number**: its only factors are 1 and 7. 7 1 7
highest common factor /ˈhaɪɪst ˈkɒmən ˈfæktə/	The **highest common factor** of 12 and 18 is 6. 12 18 6
lowest common multiple /ˈləʊɪst ˈkɒmən ˈmʌltɪpl/	The **lowest common multiple** of 4 and 6 is 12. 4 6 12
equivalent fractions /ɪˈkwɪvələnt ˈfrækʃnz/	**Equivalent fractions** describe the same value using different numbers.
mixed number /mɪkst ˈnʌmbə/	$1\frac{3}{4}$ is a **mixed number**. $1\frac{3}{4}$
common denominator /ˈkɒmən dɪˈnɒmɪneɪtə/	Find a **common denominator** before adding these fractions.
recurring decimal /rɪˈkɜːrɪŋ ˈdesɪml/	$1/3 = 0.333\ldots$ is a **recurring decimal**. $1/3 = 0.333\ldots$
square number /skweə ˈnʌmbə/	16 is a **square number**. 16
cube number /kjuːb ˈnʌmbə/	27 is a **cube number**. 27
index /ˈɪndeks/	In 2^3, the **index** is 3. 2^3 3

exercises.lol exercises.com.cn

Word	Example
surd /sɜːd/	A **surd** such as $\sqrt{5}$ is a root that cannot be simplified to a whole number. $\sqrt{5}$
rationalising the denominator /ˈræʃənəlaɪzɪŋ ðə dɪˈnɒmɪneɪtə/	**Rationalising the denominator** removes a surd from the denominator.
set /set/	A **set** holds values with no repeats.
universal set /ˌjuːnɪˈvɜːsl set/	The **universal set** contains every item we are looking at.
union /ˈjuːnɪən/	The **union** of two sets contains every item in either set.
intersection /ˌɪntəˈsekʃn/	The **intersection** of two sets contains items in both.
complement /ˈkɒmplɪmənt/	The **complement** of A is everything not in A. A A
membership /ˈmembəʃɪp/	The symbol tells us whether a number has **membership** of this set.
empty set /ˈempti set/	The **empty set** has nothing in it.
subset /ˈsʌbset/	$\{1, 2\}$ is a **subset** of $\{1, 2, 3\}$. $\{1, 2\}$ $\{1, 2, 3\}$
number of elements /ˈnʌmbə ɒv ˈelɪmənts/	Count distinct objects to find the **number of elements**.
Venn diagram /ven ˈdaɪəgræm/	A **Venn diagram** shows events as circles that may overlap.
multiplier /ˌmʌltɪˈplaɪə/	The **multiplier** means £1 of new spending can create more than £1 of income. £1 £1

exercises.lol exercises.com.cn

Word	Example
compound interest /ˈkɒmpaʊnd ˈɪntrest/	**Compound interest** is paid on the interest too.
ratio /ˈreɪʃɪəʊ/	The **ratio** of boys to girls is 2 : 3. 2 : 3
direct proportion /daɪˈrekt prəˈpɔːʃn/	If y is in **direct proportion** to x, doubling x also doubles y. y x x y
lower bound /ˈləʊə baʊnd/	The **lower bound** of the array is 1. 1
upper bound /ˈʌpə baʊnd/	The **upper bound** of the array is 10. 10
standard form /ˈstændəd fɔːm/	3×10^4 is in **standard form**. 3×10^4

exercises.lol exercises.com.cn