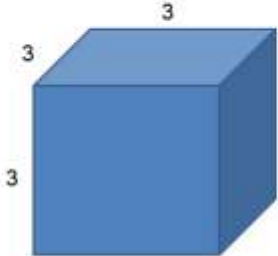


Powers and roots

Terms	Illustrations	Definitions
Cubed	<p style="text-align: center;">Cubed</p>  <p style="text-align: center;">3 cubed or $3^3 = 3 \times 3 \times 3 = 27$</p>	<p>Multiplying a number 3 times e.g. 4 cubed is $4 \times 4 \times 4 = 64$.</p> <p>The cubed sign is 3</p> <p>For example, $5^3 = 5 \times 5 \times 5 = 125$</p>
Cube root	<p style="text-align: center;">This is the symbol for 'cube root'.</p> $\sqrt[3]{27} = 3$	<p>Finding the cube root is the inverse process of cubing a number e.g. 3 cubed is $3 \times 3 \times 3 = 27$ so the cube root of 27 is 3.</p>
Power		<p>The power of a number says how many times to repeat a multiplication. It is written as a small number to the right and above the base number e.g. $8^2 = 8 \times 8$ or $8^3 = 8 \times 8 \times 8$.</p> <p>2 = "squared" (to the power of 2)</p> <p>3 = "cubed" (to the power of 3)</p> <p>All other values known as "to the power of"</p>

Powers and roots

Roots		Roots are the inverse process of powers. The root sign is $\sqrt{\quad}$
<u>Scientific Notation</u>		Scientific notation is a standardised method of writing numbers which may be too large or too small to write in full e.g. <ul style="list-style-type: none">• 700 000 can be written as 7×10^5• 8 000 000 can be written as 8×10^6
Square Root / Square numbers	<p>This is the symbol for a 'square root'</p> $\sqrt{9} = 3$	The square root of a number is a value that, when multiplied by itself, gives the number e.g. $4 \times 4 = 16$, so the square root of 16 is 4. The symbol is $\sqrt{\quad}$ which always means the positive square root e.g. $\sqrt{36} = 6$ (because $6 \times 6 = 36$)