

## Surd or Not a Surd?

Question	As a decimal or whole number	Is it a surd?	Question	As a decimal or whole number	Is it a surd?
$\sqrt{1}$	1	No	$\sqrt{16}$	4	No
$\sqrt{2}$	1.4142135 ...	Yes	$\sqrt{17}$	4.1231056 ...	Yes
$\sqrt{3}$	1.7320508 ...	Yes	$\sqrt{18}$	4.2426406 ...	Yes
$\sqrt{4}$	2	No	$\sqrt{19}$	4.3588989 ...	Yes
$\sqrt{5}$	2.2360679 ...	Yes	$\sqrt{20}$	4.4721359 ...	Yes
$\sqrt{6}$	2.4494897 ...	Yes	$\sqrt{21}$	4.5825756 ...	Yes
$\sqrt{7}$	2.6457513 ...	Yes	$\sqrt{22}$	4.6904157 ...	Yes
$\sqrt{8}$	2.8284271 ...	Yes	$\sqrt{23}$	4.7958315 ...	Yes
$\sqrt{9}$	3	No	$\sqrt{24}$	4.8989794 ...	Yes
$\sqrt{10}$	3.1622776 ...	Yes	$\sqrt{25}$	5	No
$\sqrt{11}$	3.3166247 ...	Yes	$\sqrt{26}$	5.0990195 ...	Yes
$\sqrt{12}$	3.4641016 ...	Yes	$\sqrt{27}$	5.1961524 ...	Yes
$\sqrt{13}$	3.6055512 ...	Yes	$\sqrt{28}$	5.2915026 ...	Yes
$\sqrt{14}$	3.7416573 ...	Yes	$\sqrt{29}$	5.3851648 ...	Yes
$\sqrt{15}$	3.8729833..	Yes	$\sqrt{30}$	5.4772255 ...	Yes

How can you tell if a square root is a surd or not?

If the number inside the square root is a square number then it is not a surd

Write down the next three square roots which are not surds.

$$\sqrt{36}, \sqrt{49}, \sqrt{64}$$