

Is it Rational?

Remember that a bar over digits indicates a recurring decimal number, e.g. $0.\overline{256} = 0.2565656\dots$

For each of the numbers below, decide whether it is rational or irrational.

Explain your reasoning in detail.

5	
$\frac{5}{7}$	
0.575	
$\sqrt{5}$	
$5 + \sqrt{7}$	
$\frac{\sqrt{10}}{2}$	
5.75....	