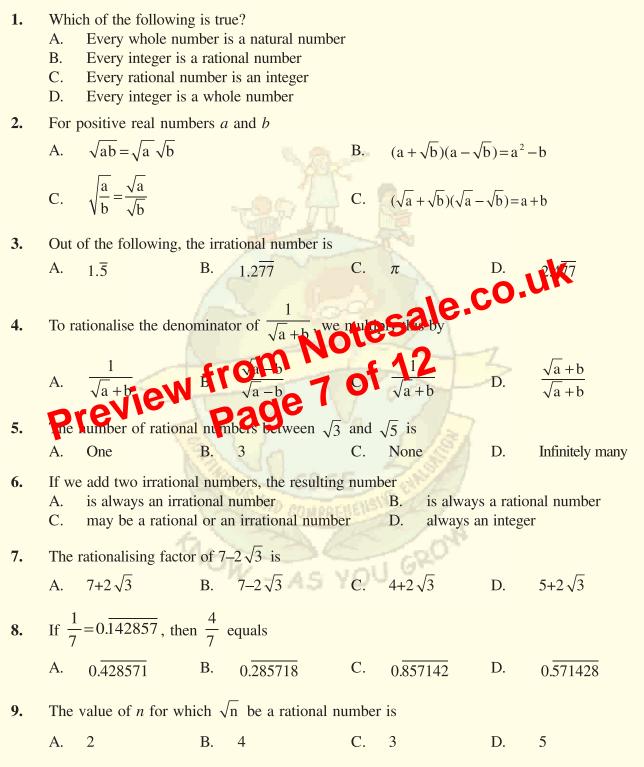
## Home Assignment-1 (Multiple Choice Questions)





6. If 
$$x = \frac{\sqrt{2}+1}{\sqrt{2}-1}$$
 and  $y = \frac{\sqrt{2}-1}{\sqrt{2}+1}$ , find the value of  $x^2 + y^2 + xy$ 

7. If 
$$\frac{5+2\sqrt{3}}{7+\sqrt{3}} = a - \sqrt{3b}$$
, find *a* and *b* where *a* and *b* are rational numbers.

8. Evaluate:

$$\frac{1}{\sqrt{2}+1} + \frac{1}{\sqrt{3}+\sqrt{2}} + \frac{1}{\sqrt{4}+\sqrt{3}} + \dots + \frac{1}{\sqrt{9}+\sqrt{8}}$$

- 9. If  $x = \frac{1}{2 + \sqrt{3}}$ , find the value of  $2x^3 7x^2 2x + 1$
- 10. If  $\sqrt{2} = 1.414$  and  $\sqrt{5} = 2.236$ , find the value of  $\frac{\sqrt{10} \sqrt{5}}{2\sqrt{2}}$  upto three places of decimals **Task-4: Hands on activity**

Торіс	Number SDam
Nature of task	Content
Content Coverand	Representation of irrational numbers
Learning Objectives	To learn to make a square root spiral using compass and ruler on a sheet of paper.
Task	Maths activity
Execution of task	An instruction sheet containing pictures of initial steps can be given to students for reference. They will be then asked to complete the square root spiral and interpret the figure obtained.
Duration	1 period
Criteria for assessment	This activity will be a part of Maths activity, so it will be assessed according to the following given parameters: Class Ethics
	Performance of activity
	File Record
	(marks may be allotted by the teacher accordingly)
Follow up	_

