

01

If $x > \frac{1}{2}$, find the simplest radical form expression for $\frac{1 + \sqrt{2x-1}}{\sqrt{x + \sqrt{2x-1}}}$.

Your solution here:

02

Find the value of $20202021 \times 20212020 - 20202020 \times 20212021$.

Your solution here:

03 For what ordered triple of integers (a, b, c) is $x = \frac{3}{\sqrt[3]{7-2}}$ a solution of $x^3 + ax^2 + bx + c = 10$?

Your solution here:

04 What are all values of x that satisfy $x\sqrt{x} - 2\sqrt{x} = x$?

Your solution here:

05

If x is a real number, atmost how many integers can lie between the number

$$x - \frac{2020}{2021} \text{ and } x + \frac{2020}{2021} ?$$

Your solution here:

06

If $a^2 \neq b^2$, what are both solutions of $(a^2 - b^2)x^2 - (a^2 + b^2)x + ab = 0$?

Your solution here: