

8. $P = \frac{b}{4} \left(\sqrt{\frac{2a-b}{2a+b}} \right) \rightarrow \text{prime.}$

As it is prime.

$$P = \frac{b}{4}, \sqrt{\frac{2a-b}{2a+b}} = 1 \quad (\text{or}) \quad P = \sqrt{\frac{2a-b}{2a+b}}, \frac{b}{4} = 1.$$

$$2a-b = 2a+b$$

$$2b = 0$$

$$b = 0$$

$$P = 0$$

not a prime.

$$b = 4$$

$$P = \sqrt{\frac{a-2}{a+2}}$$

prime.

as $a, b \in \mathbb{N}$

$a = 2 \rightarrow P = 0 \rightarrow \text{not prime.}$

$a > 2 \rightarrow P \rightarrow \text{fraction.}$

So, there are no possible values of a, b, p for given condition.