## Answer on Question \#48399-Engineering-Other

If the roots of the polynomial $p(x)=x^{2}-b x+c$ be two consecutive integers then $b^{2}-4 c$ equals.

## Solution

We have an equation

$$
\begin{gathered}
x^{2}-b x+c=0 \\
D=b^{2}-4 c
\end{gathered}
$$

Also, the difference between the roots is

$$
x_{2}-x_{1}=\sqrt{D}
$$

But $x_{1}$ and $x_{2}$ are two consecutive integers:

$$
x_{2}-x_{1}=\sqrt{D}=1
$$

So,

$$
b^{2}-4 c=1
$$

## Answer: 1.

