Then the following results are obtained:

a) $X - 17Y + 16Z + 18 = 0.$

b) $\frac{2A}{P} = x_{n+1} y_{n+1}.$

c) $3(Z - Y)$ is a nasty number.

d) $3(X - \frac{4A}{P})$ is a nasty number.

e) $X - \frac{4A}{P} + Y$ is written as the sum of two squares.

## Conclusion

In this paper, we have presented infinitely many integer solutions for the positive Pell Equation $y^2 = 34x^2 + 18$. As the binary quadratic Diophantine equations are rich in variety, one may search for the other choices of Pell Equations and determine their integer solutions along with suitable properties.

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