

THINK IT OVER

The following results can also be proved,

$$\text{If } x = -y + \left(\frac{z}{y} + y^3\right)^{1/3}, \text{ then } 3y = -x + \left(\frac{9z}{x} + x^3\right)^{1/3}.$$

Here 3 and 9 cannot be replaced by any other pair of numbers.

And if

$$x = y + \left(\frac{z}{y} + y^2\right)^{1/2} \text{ then } 4y = x + \left(\frac{-8z}{x} + x^2\right)^{1/2}.$$

Again, 4 and 8 cannot be replaced by any other pair of numbers.

Suggested Reading

- [1] T K S V Iyer, On a Result of Ramanujan, *Resonance*, Vol.12, No.1, pp.80–81, 2007.

Errata

Resonance, Vol.12, No.10, pp.67–70, 2007.

Classroom:

Root Test and Ratio Test in the Context of (C, k) Summability of Series by P N Natarajan

$k \geq 0$ should read as $k > 0$ in the following lines :

Page 67: line 5 from top;

Page 68: line 5 from bottom;

Page 69: line 2 & line 3 from top;

Page 70: line 8 from top & line 6 from bottom

$k > -1$ should read as $0 > k > -1$ in the following lines:

Page 69: line 7 from bottom;

Page 70: line 3 from bottom.

