

March 3rd

$$81^3 + 81^3 + 81^3 + 81^3 + 81^3 + 81^3 + 81^3 + 81^3 + 81^3 = 3^x$$

$$\text{LHS} = 9 \times 81^3$$

$$= 9 \times (9^2)^3$$

$$= 9 \times 9^6$$

$$= 9^7$$

$$= (3^2)^7$$

$$= 3^{14}$$

Hence **$x = 14$**