

Tom's age is  $T$ , which is also the sum of the ages of his 3 children.  
His age  $N$  years ago was twice the sum of their ages then.  
Find  $T/N$

$$T = a + b + c$$

$$T - N = 2(a - N + b - N + c - N)$$

$$= 2(a + b + c - 3N)$$

$$= 2(a + b + c) - 6N$$

$$\Rightarrow T + 5N = 2(a + b + c)$$

$$\Rightarrow a + b + c = \frac{T + 5N}{2}$$

$$\Rightarrow T = \frac{T + 5N}{2}$$

$$\Rightarrow 2T = T + 5N$$

$$\Rightarrow T = 5N$$

$$\Rightarrow \frac{T}{N} = 5$$