

6k) A man is now 3 times as old as his son. In ten (10) year time, the sum of their ages will be 76. How old was the man when his son was born?

~~currently~~

Sol:

currently

$$\text{Age of child} = x$$

$$\text{Age of father} = 3x$$

After 10 years

$$\text{Age of child} = x + 10$$

$$\text{Age of father} = 3x + 10$$

$$(x + 10) + (3x + 10) = 76$$

$$4x + 20 = 76$$

$$4x = 76 - 20$$

$$4x = 56$$

$$x = 56/4$$

$$x = 14$$

After the time of the child's birth the father was

$$2x = 2 \times 14 = 28 \text{ years old}$$

Answer = 28 years old.