

Answer on Question #40705 – Math – Algebra

A man is 24 years older than his son. 12 years ago, he was five times as old as his son. What are the present ages of both?

Solution:

Let X years be a man at present time.

Let $(X-24)$ years be his son at present time.

Then, from the problem above:

$$X-12=5((X-24)-12),$$

$$X-12=5(X-36), X-12=5X-180,$$

$$-4X=-168, \text{ whence}$$

$$X=42 \text{ (years)}.$$

$$42-24=18 \text{ (years)}.$$

Answer: 42 and 18.