

Question #75729, Math / Financial Math

A company analyses its profits for four consecutive years, from 2007 to 2010. the profit made in 2007 was twice that in 2009. the profit made in 2008 was R14million more than the profit made in 2009, while the profit made in 2010 was R4 million less than the profit made in 2007. If the total made in these four years was R58million determine the profit made in each year.

Solution:

Let the profit made in 2008 was R x million. Then the profit made in 2009 was $x/2$.

The profit made in 2008 was R 14 million more than the profit made in 2009, it means: $x/2 + R 14$ million. And the profit made in 2010 was R 4 million less than the profit made in 2007, it means: $x - R 4$ million. At last, the total profit made in these four years was R 58 million, it means: $x + x/2 + R 14$ million + $x/2 + x - R 4$ million = R 58 million.

$$3x + R 10 \text{ million} = R 58 \text{ million};$$

$$3x = R 48 \text{ million};$$

$$x = R 16 \text{ million};$$

In this way, the profit made in 2007 was R 16 million, the profit made in 2008 was R 22 million, the profit made in 2009 was R 8 million, and the profit made in 2010 was R 12 million.

Answer:

The profit made in 2007 was R 16 million, the profit made in 2008 was R 22 million, the profit made in 2009 was R 8 million, and the profit made in 2010 was R 12 million.

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